

GunDigest® Book of

AUTOMATIC PISTOLS

ASSEMBLY/DISASSEMBLY



4TH
EDITION

Step-by-step
photos for 90
models & over
300 variants

Kevin Muramatsu

**GunDigest® Book of
AUTOMATIC
PISTOLS
ASSEMBLY/DISASSEMBLY**

Kevin Muramatsu

Dedication

*This volume is dedicated to my uncle, Denis. He taught me how to shoot,
how to hunt, how to work and the value of hard work,
and in many important other ways, how to be a man.
This is a meager thank you, but a thank you nonetheless.*

Acknowledgments

I would like to express my appreciation to a few folks whose help was quite valuable in completing this book. They were instrumental in the acquisition of handguns and the answering of questions.

*The Wolf's Den Gun Shop, Derek Kellgren from Kel-Tec,
Thomas Spithaler from Olympic Arms, Dennis Conroy,
Caleb Siedlecki from RSR Group,
Matt Rice from Blue Heron Communications,
Mike Nischalke of Hunter Outdoor Communications,
Bonnie Tetzlaff and Corrina Peterson from F + W for reminding me to sign
my contract,
Seth from CDNN,
and last but definitely not least, J.B. Wood
for starting these books many years ago for the benefit of the shooter and
gunsmith.*

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Introduction

One of the best aspects of being a gunsmith is the wonderful blessing of having a hobby turned into a career. Many times I have pitied the dude who was so frustrated with his job he wanted to tell his boss where to shove it, but simply couldn't afford to give up the now crummy job, since it paid the bills. Or the fellow who went to college for whatever degree in whatever field, was performing well in that field, but then the glow departed and boredom and apathy set in. That's where I was not too many years ago, sitting on a BS in I-don't-want-to-do-this-anymore.

When you work with firearms, there is just short of an infinity of new things to see, and opportunities to figure out how they work, and try to decide why this company's pistol is more worth a month's pay than this other company's pistol. We live in the Golden Age of firearms ownership. More guns are being designed and manufactured today for sale to the American citizen than ever before. It must be mindboggling to the first time handgun purchaser trying to choose what to get. The answer for a gunsmith is to simply get them all. The corresponding curse then is that they all must be taken apart to see how they work.

This book and its brothers in the Assembly/Disassembly series are written just for those occasions. These take down steps can be invaluable to the professional and the lay person, and yes, even to the manufacturers. Many manufacturers, mostly the big name guys, tend to encourage that firearms be returned to the factory for service. There are a lot of people that for whatever reason aren't going to do that, and this book can keep the repairs and curiosity takedowns from becoming brown-bag specials. Of course, gunsmiths must service their customers' guns; that is their function. Many gun owners like to do the same thing, and this is usually a good thing, since a man who understands how his gun works will likely take better care of it, resulting in a better maintained and therefore, safer gun. This gun

owner will be better able to identify malfunctions, know why this piece is here, and what that spring is for, and why the gun doesn't fire when the magazine is out.

The steps in this book are designed to be as linear as possible. When disassembling the handgun, simply follow the steps in the order given. The reader will note that the reassembly tips are far fewer than the given steps for disassembly. The reassembly can generally be accomplished by reinstalling the parts in the reverse order of the disassembly. If there are deviations, these deviations are noted. The use of a digital camera is priceless. It should be standard practice, when disassembling a gun for the first time, to take images of each step. It's astounding how the "oh nuts" moment becomes an "oh yeah, I see how it was" moment. A cheap 2-4 megapixel camera is sufficient.

There is a fair selection of basic tools needed for disassembly of the firearms in this book. Punches of various sorts, such as roll pin punches, starter punches, and standard drift punches, are necessities. Small hammers for tapping (not pounding) and a diverse selection of screwdrivers and hex wrenches (standard and metric) will also be needed. Of particular importance is the use of screwdrivers with hollow ground tips, not the standard taper-type tips. These types of things are noted in the tools section.

We will not go over, every single time, the fact that one should triple check to ensure the gun is unloaded, but just this once, right now. Do not ever work on a loaded firearm. Remove the magazine, empty the chamber. On revolvers, check every chamber.

When removing screws, use the proper sized tool, and don't pry something out of a slot. There's a better way to do it. I have to apologize, since I have used the word "pry" several times in this book. A better phrase would be "gently nudge the part away from" but "pry" is shorter and gets the meaning across. You don't want to leave a mark in the finish, or a gouge in the polymer frame. Generally, greater force results in greater damage, with little to no better result.

Use safety glasses, since you don't want springs stuck in your eyes, and wait till you get home to your well-lit workbench before you take

the gun apart. Read the manuals supplied with the firearm; you might even find a schematic to help you out in the last few pages.

In the last pages of this book is a cross-referencing index. Many of these guns, one of the most notable being the 1911, have many clones and copies, all of which are pretty much the same when being taken apart and put back together. Unfortunately, a complete list is impossible. Fortunately, there are a lot of common trends, such as in fire control designs, takedown methods, and ignition methods, and many guns are so closely related to others that a little research can provide a basis of knowledge. Still the index is quite expansive, referencing many hundreds more guns than can be covered in the preceding pages.

It is recommended that the user of this manual also acquire an even larger tome published by FW Media/Krause Publications, called the *Gun Digest Book of Exploded Gun Drawings*. Sometimes a simple drawing can be incredibly informative, many showing the exact placement and direction of insertion with simple lines on paper.

Kevin Muramatsu

Somewhere in the Twin Cities

Somewhere in Minnesota

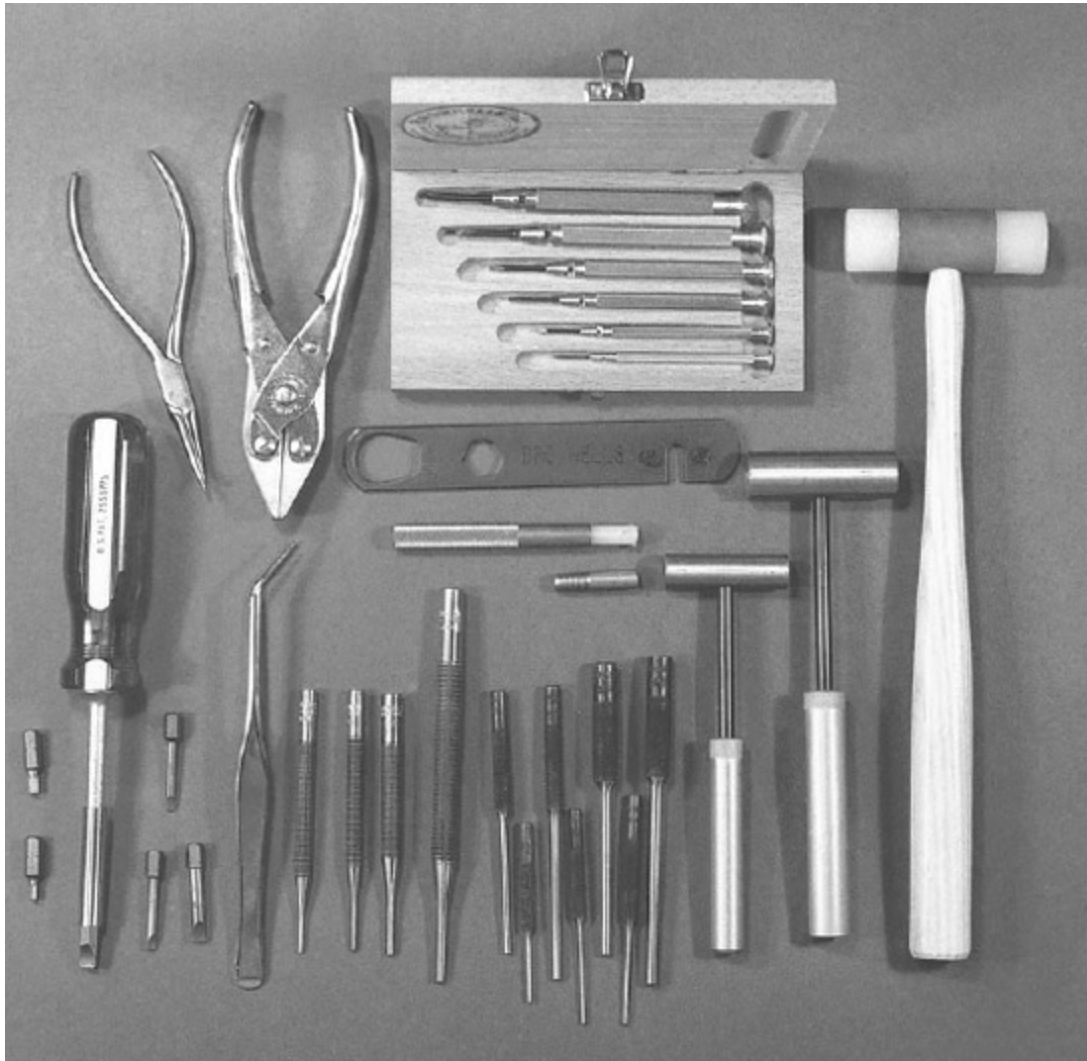
December

A Note on Reassembly

Most of the pistols covered in this book can be reassembled by simply reversing the order of disassembly, carefully replacing the parts in the same manner they were removed. In a few instances, special instructions are required, and these are listed with each gun under “Reassembly Tips.” In certain cases, reassembly photos are also provided.

During disassembly, note the relationship of all parts and springs, take digital photos of the installed arrangements, and lay them out on the workbench in the order they were removed. By following this procedure and referring to your own digital images, you should have no difficulty.

TOOLS



Countless firearms, old and new, bear the marks, burrs and gouges that are the result of using the wrong tools for taking them apart. In the interest of preventing this sort of thing, I am including here a group of tools that are the best types for the disassembly of automatic pistols. Except for the few shop-made tools for special purposes, all of those shown here are available from one of these three sources.

Brownells, Inc.

**200 South Front Street
Montezuma, IA 50171**

**B-Square Company
8909 Forum Way
Ft. Worth, TX 76140**

**Midway USA
5875 West Van Horn Tavern Road
Columbia, MO 65203**

**Williams Gun Sight Company
7389 Lapeer Road
Davison, MI 48423**

General Instructions:

Screwdrivers: Always be sure the blade of the screwdriver **exactly** fits the slot in the screw head, both in thickness and in width. If you don't have one that fits, grind or file the top until it does. You may ruin a few screwdrivers but better them than the screws on a fine rifle.

Slave pins: There are several references in this book to slave pins, and some non-gunsmith readers may not be familiar with the term. A slave pin is simply a short length of rod stock (in some cases, a section of a nail will do) which is used to keep two parts, or a part and a spring, together during reassembly. The slave pin must be very slightly smaller in diameter than the hole in the part, so it will push out easily as the original pin is driven in to retain the part. When making the slave pin, its length should be slightly less than the width of the part in which it is being used, and the ends of the pin should be rounded or beveled.

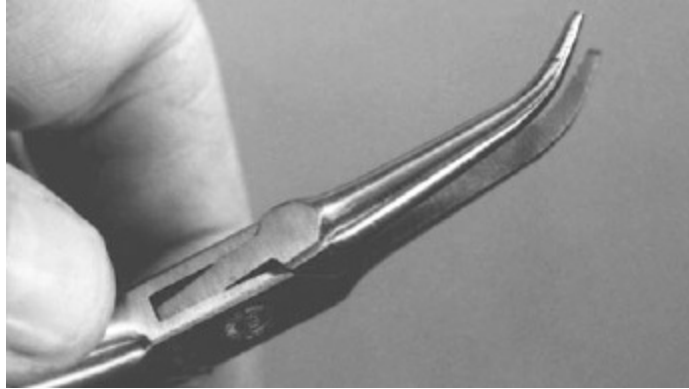
Sights: Nearly all dovetail-mounted sights are drifted out toward the right, using a nylon, aluminum, or brass drift punch.



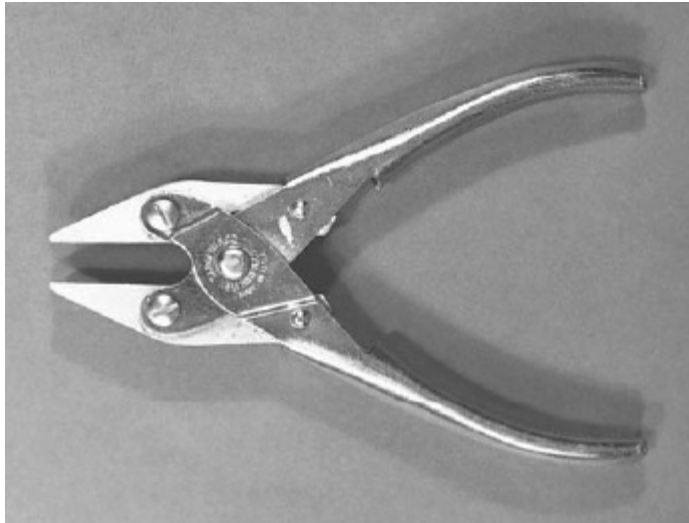
1. The tiniest of these fine German instrument screwdrivers from Brownells is too small for most gun work, but you'll see the rest of them used frequently throughout the book. There are many tight places where these will come in handy.



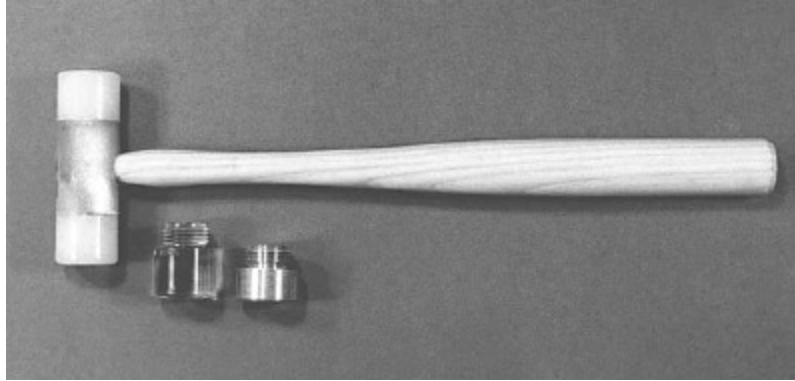
2. When a larger screwdriver is needed, this set from Brownells covers a wide range of blade sizes and also has Phillips- and Allen-type inserts. The tips are held in place by a strong magnet, yet are easily changed. These tips are very hard. With enough force you might manage to break one, but they'll never bend.



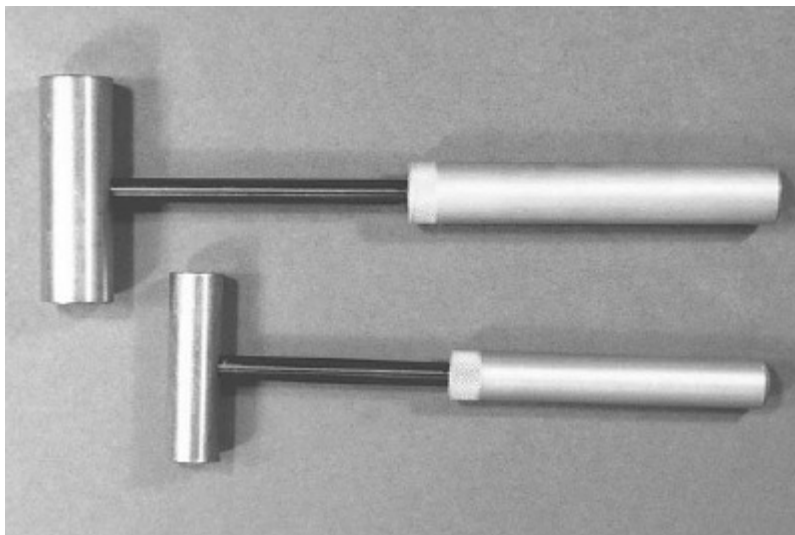
- 3.** You should have at least one good pair of bent sharp-nosed pliers. These, from Brownells, have a box joint and smooth inner faces to help prevent marring.



- 4.** For heavier gripping, these Bernard parallel-jaw pliers from Brownells have smooth-faced jaw-pieces of unhardened steel to prevent marring of parts.



- 5.** For situations where a non-marring rap is needed, this hammer from Brownells is ideal. It is shown with nylon faces on the head, but other faces of plastic and brass are also available. All are easily replaceable.



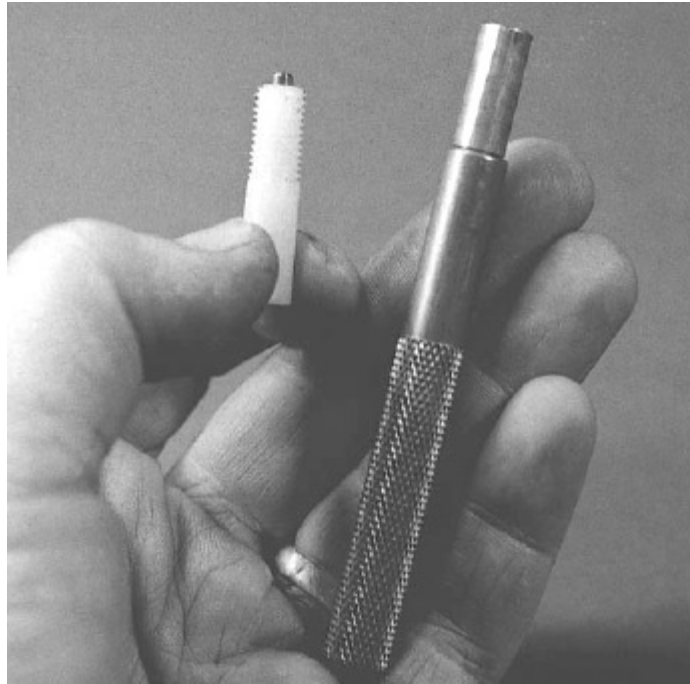
- 6.** For drifting out pins, these small all-metal hammers from B-Square are the best I've seen. Two sizes (weights) are available and they're well worth the modest cost.



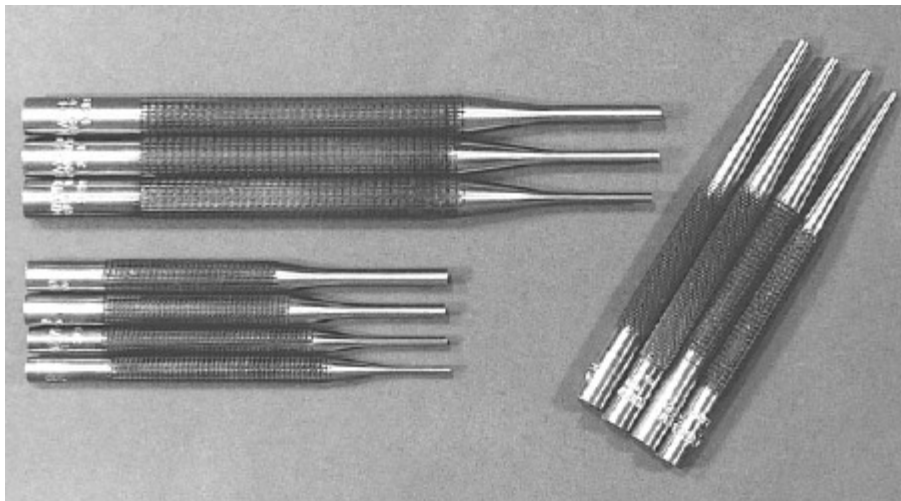
7. For situations where reach and accessibility are beyond the capabilities of sharp-nosed pliers, a pair of large sharp-nosed forceps (tweezers) will be invaluable.



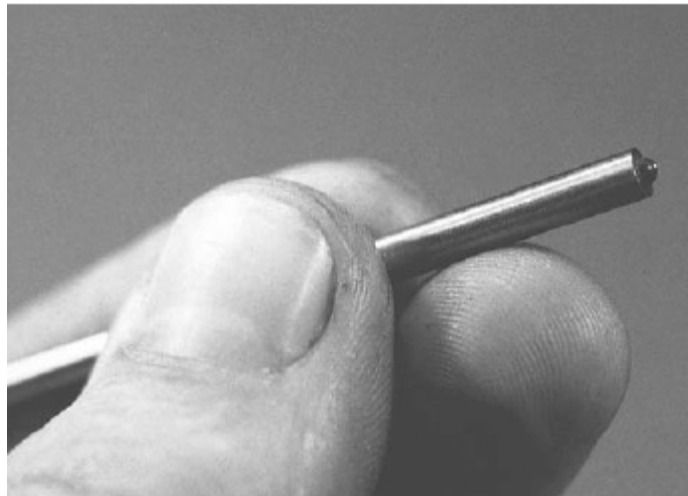
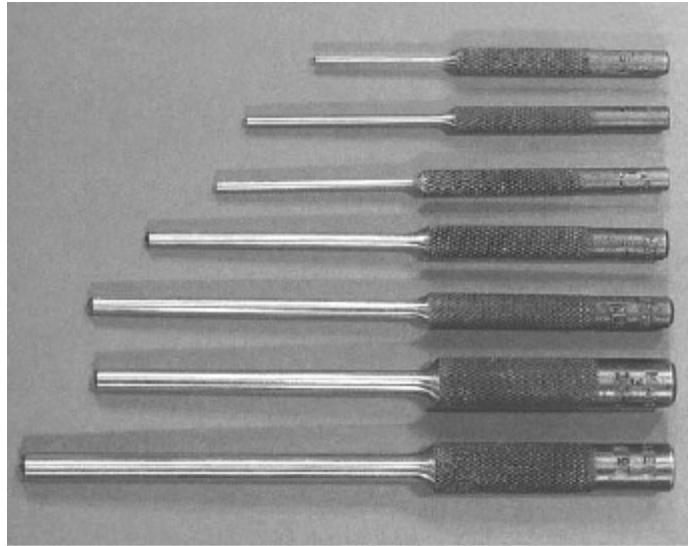
- 8.** This universal Colt tool from Brownells will also work on some other autos of similar design, and even has features for some revolver work. Its main function, of course, is for the removal of a tight barrel brushing on Colt autos.



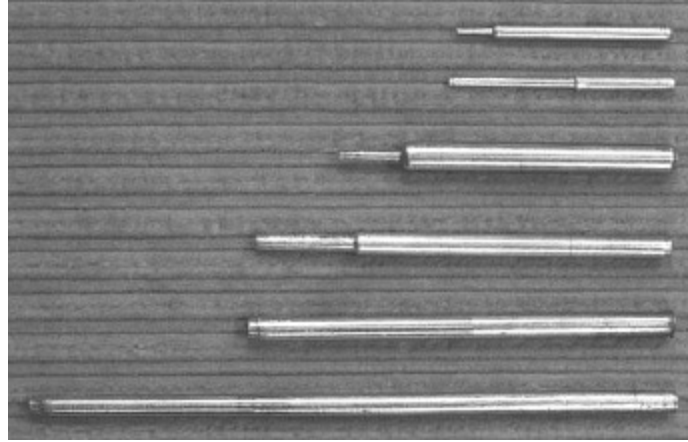
- 9.** One of the most-used tools in my shop is this nylon tipped drift punch, shown with an optional brass tip in place on the handle. It has a steel pin inside the nylon tip for strength. From Brownells, and absolutely essential.



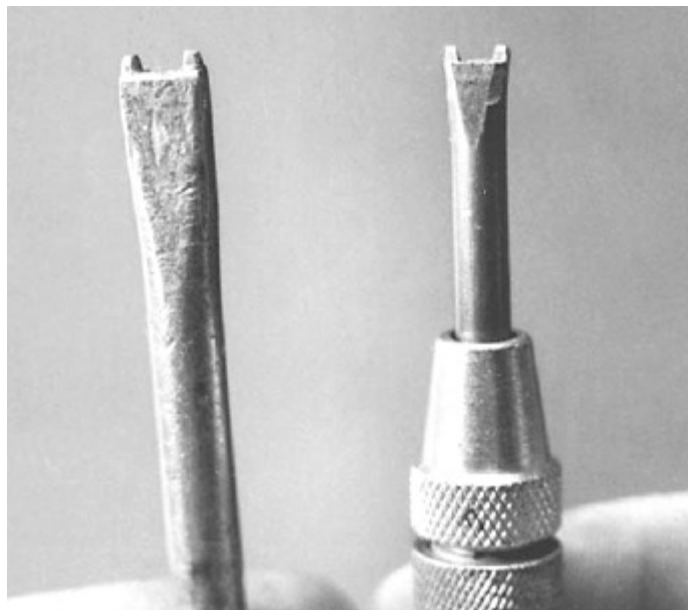
- 10.** A good set of drift punches will prevent a lot of marred pins. These, from Brownells, are made by Mayhew. The tapered punches at the right are for starting pins, the others for pushing them through. Two sizes are available-4 inches or 6 inches.



- 11.** These punches by Mayhew are designed specifically for roll pins and have a projection at the center of the tip to fit the hollow center of a roll pin, driving it out without deformation of the ends. From Brownells.



- 12.** Some of the necessary tools are easily made in the shop. These non-marring drift punches were made from three sizes of welder's brazing rod.



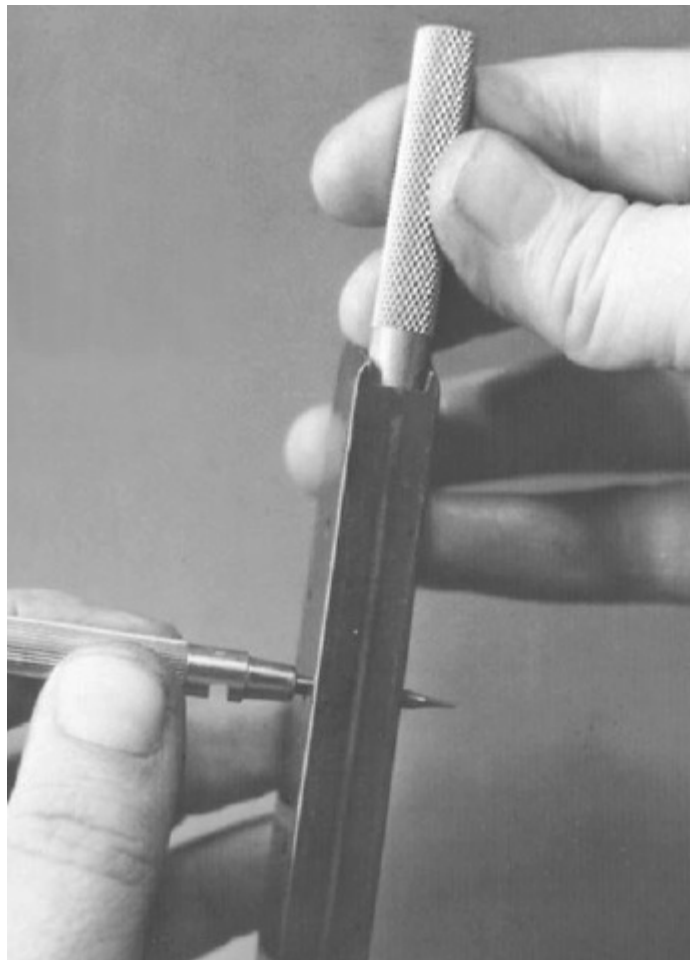
- 13.** In automatic pistols, the most frequent need for a split-end screwdriver, or two-point wrench, occurs with certain magazine catch buttons. The ones shown were made by cutting away the center of old screwdriver blades, then thinning the points to fit the job. They may be a bit on the crude side but they work!
- 14.** A digital camera, even a cheap low resolution model can be invaluable. The ability to take a quick, free photo of anything that you are doing for reference is a modern convenience that

one would be foolish to neglect.

Magazine Disassembly

In regards to takedown, most magazines fall into two general categories distinguished by fixed or removable floorplates. An example of the fixed type is the magazine of the 45-caliber 1911 military pistol. Most of the currently-made pistols, especially in the larger calibers, have magazines with removable floorplates.

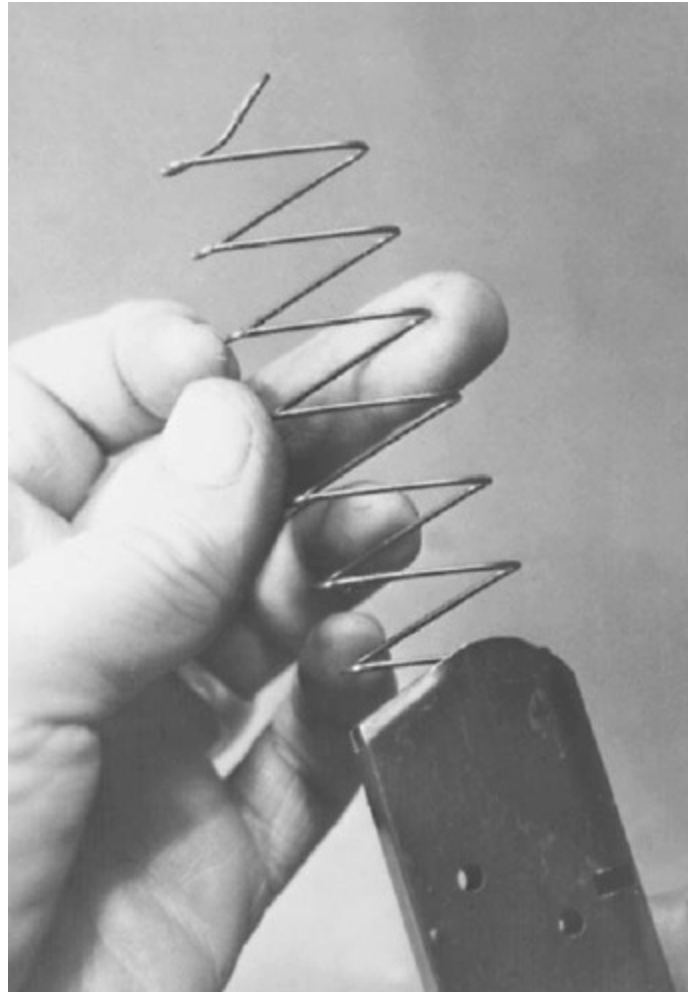
Fixed Floorplate Type:



1. With a nylon-tipped punch or some other non-marring tool, depress the magazine follower to about the halfway point, and insert a small screwdriver through one of the counter holes and between the follower and the spring.



2. With the spring trapped beneath the screwdriver, the follower can usually be shaken out and removed from the top of the magazine. If the follower is tight, it may be necessary to insert another small tool through one of the other counter holes and lever it upward to free it.



3. Hold a heavy shop cloth over the top of the magazine to catch the spring and remove the screwdriver from the counter hole.

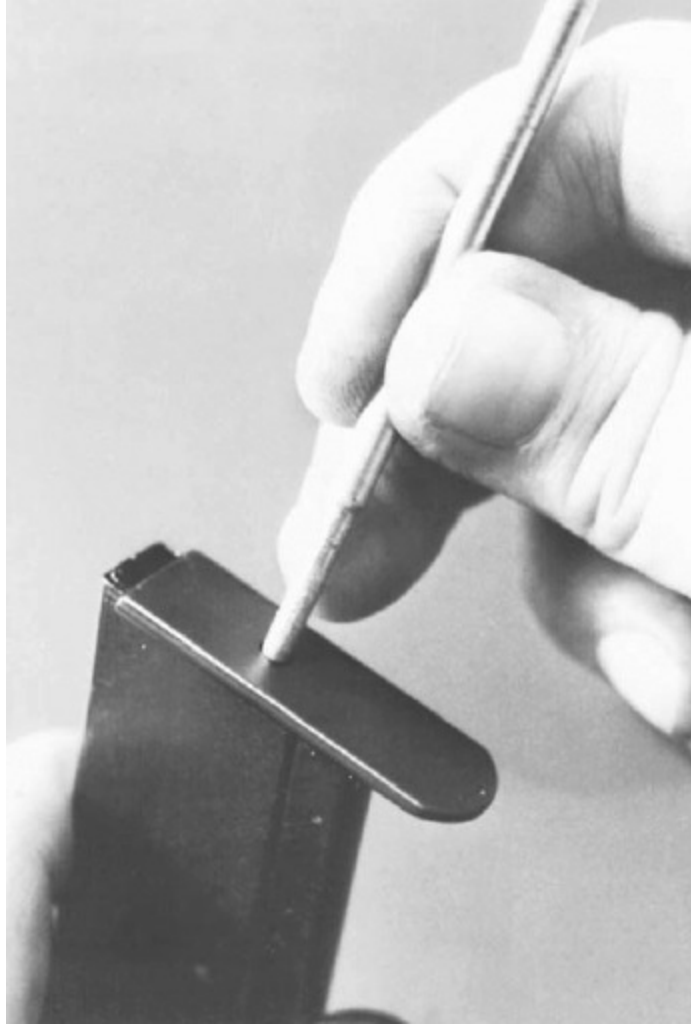
CAUTION: *The spring is under tension, so be sure the cloth gives enough padding to prevent injury.* Remove the spring from the top of the magazine.

Most fixed-floorplate magazines can be completely disassembled, as the floorplate is usually held in place either by cross-pins, or by staking the lower edge of the magazine shell into grooves or recesses. But, even when removal is done by a careful professional, some damage is inevitable. It's best to leave the fixed-type floorplates in place.

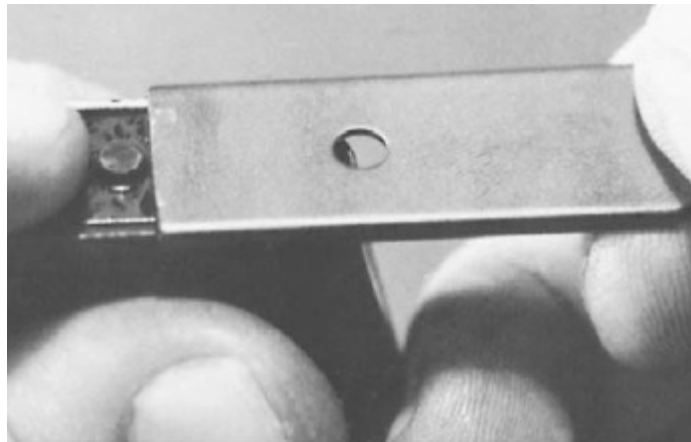
Removable Floorplate Type:



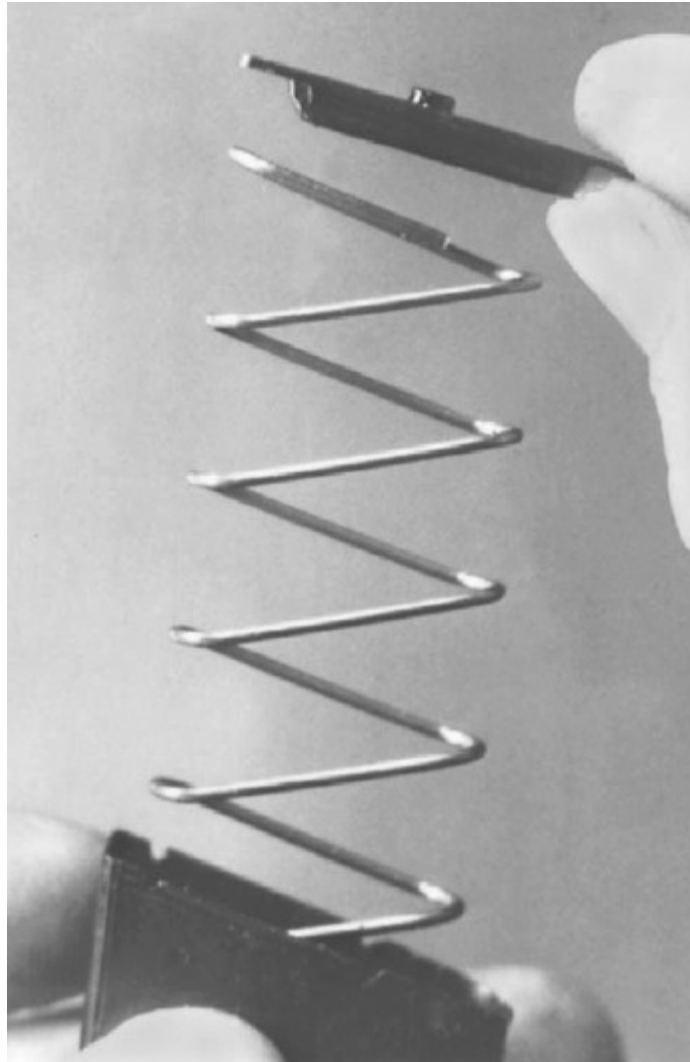
4. The removable floorplate is usually locked in place by an internal lockplate with a button at the center which protrudes through a hole in the floorplate.



5. Depress the button with a brass punch or some other non-marring tool and slide the floorplate toward the front of the magazine, but not more than half-way.



6. Restrain the lockplate against the tension of the magazine spring, and slide the floorplate off toward the front. **Caution:** *Be sure to keep the lockplate under control, as the spring can send it quite a distance if released suddenly.*

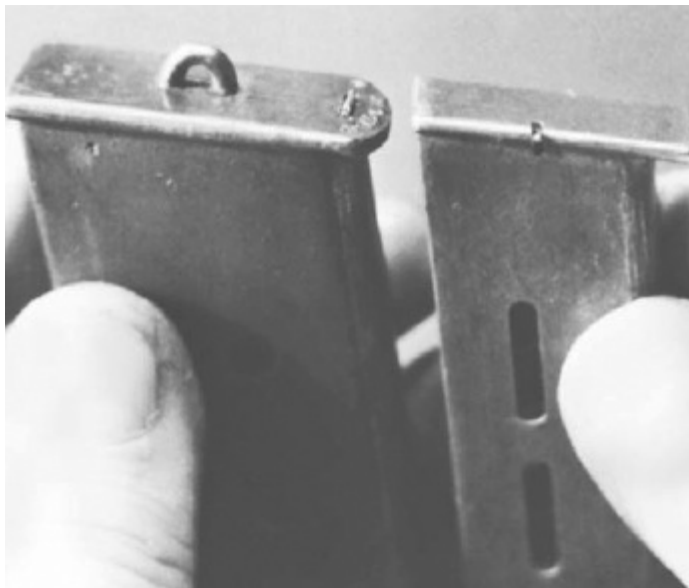


7. Release the spring tension slowly, and remove the lockplate, spring, and follower from the bottom of the magazine.

Other Magazines:



8. In some magazines, such as the Parabellum (Luger) shown, the floorplate is a shaped endpiece retained by one or more cross-pins. When these are drifted out, the endpiece can be removed and the spring taken out from the bottom of the magazine. The follower is then moved down until the follower button aligns with its opening in the side track. The button is then lifted out toward the side and the follower removed from the bottom.



9. Some magazines with sliding removable floorplates have different retaining methods. The Russian Tokarev, shown on the left, has an internal lockplate with a release tab near the front of the plate. This is pushed inward, in the same way as the button on the usual type. The Mauser 1910 (right) has a slot in the left edge of the floorplate for the angled tip of the magazine spring. The tip of the spring is pushed upward to clear the slot and the floorplate is slid off toward the front.

AMT Back-Up



Data: AMT Back-Up

Origin: United States

Manufacturer: AMT, Inc. El Monte,
California

Cartridge: 380 ACP

Magazine 5 rounds
capacity:

Over-all length: 5 inches

Height: 4 inches

Barrel length: 2⁹/₁₆ inches

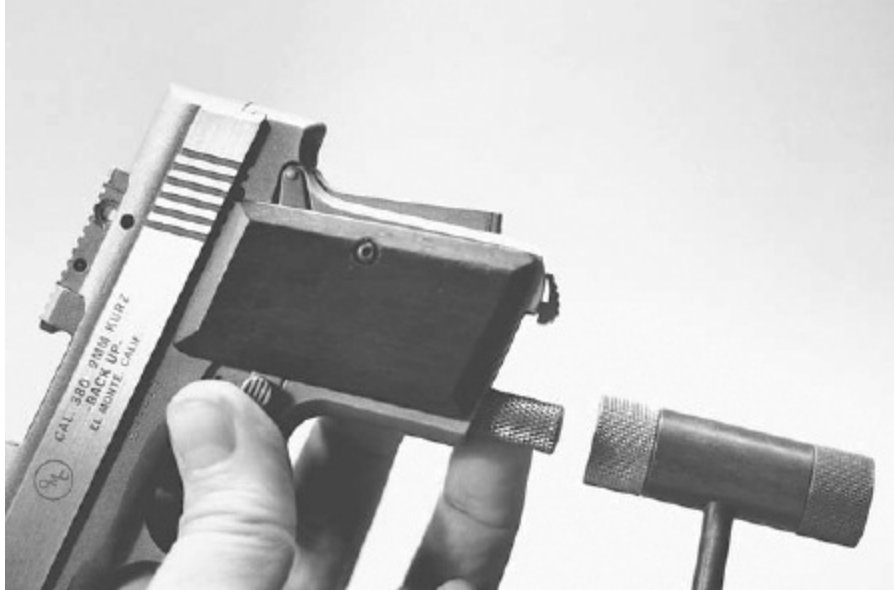
Weight: 17 ounces

The “Back-Up” is made entirely of stainless steel, and, as its name implies, it is intended as a “back-up” gun for the law officer, for use if his regular sidearm is disabled, empty or lost during a serious social encounter. The little Back-Up is also popular as a self-defense pistol for the private citizen. The excellent and mechanically simple design is the work of John Raymond Wilkinson.

Detail Strip:



1. With the magazine removed and the hammer in the fired position, use a non-marring drift to drive out the breechblock cross-pin toward either side.



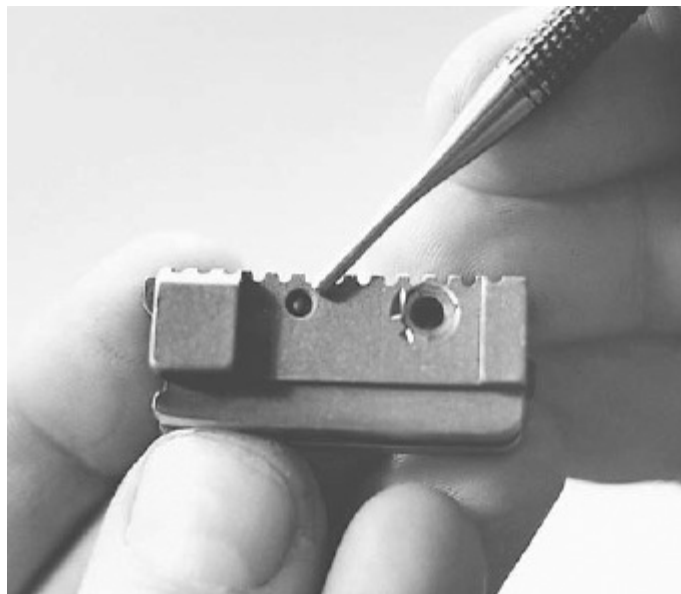
2. With a non-marring tool such as a nylon-tipped punch or a wooden dowel, nudge the breechblock upward, working through the magazine well.



3. Remove the breechblock from the top of the slide.



4. Allow the slide to move forward until it clears the, short slide rails at the rear of the frame, and lift the slide upward at the rear to clear the barrel. Move the slide assembly forward off the barrel and frame. Remove the recoil spring and its guide from the frame.



5. Drifting out the small cross-pin in the breechblock will free the extractor and its coil spring for removal upward. **CAUTION:** *Removal of the extractor will also release the firing pin and its spring,*

so control the firing pin as the extractor is removed. The circular spring, which retains the breechblock cross-pin, is staked in place on the left side, and no attempt should be made to remove it.



6. Use an Allen wrench of the proper size to back out the grip screws. Lift the grip panels at the rear for removal.

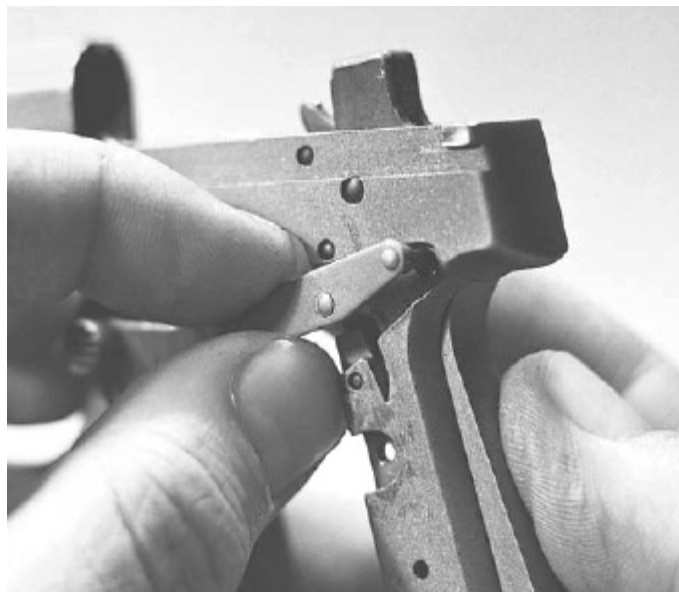


7. With a small tool, detach the trigger bar spring from its groove in the rear lower edge of the trigger bar, and move it inward,

behind the bar. Restrain the trigger, and remove the trigger bar toward the left.



- 8.** Removal of the trigger bar will release the trigger and its spring to move forward, and it can then be removed toward either side. Take care that the small trigger spring is not lost.



- 9.** Remove the safety lever toward the left. Take care not to exert outward pressure on the front of the lever.



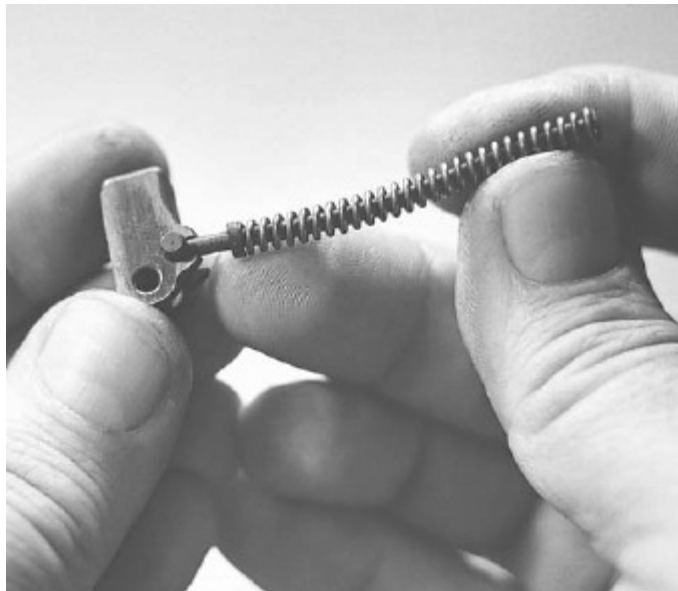
- 10.** Drift out the small pin at the top of the frame enough to partially release the ejector. It is not removed at this time.



- 11.** With the hammer in the fired position, restrain it, and push out the hammer pivot toward the right.



- 12.** Ease the hammer out upward, along with its strut and spring, and remove the ejector, which will also be released. **CAUTION:** *The hammer spring is under tension.*



- 13.** The hammer strut is easily removable from the hammer by turning it straight out to the rear and sliding it out of its seat in the hammer toward either side.



- 14.** Drift out the sear cross-pin, and remove the sear forward, into the magazine well.



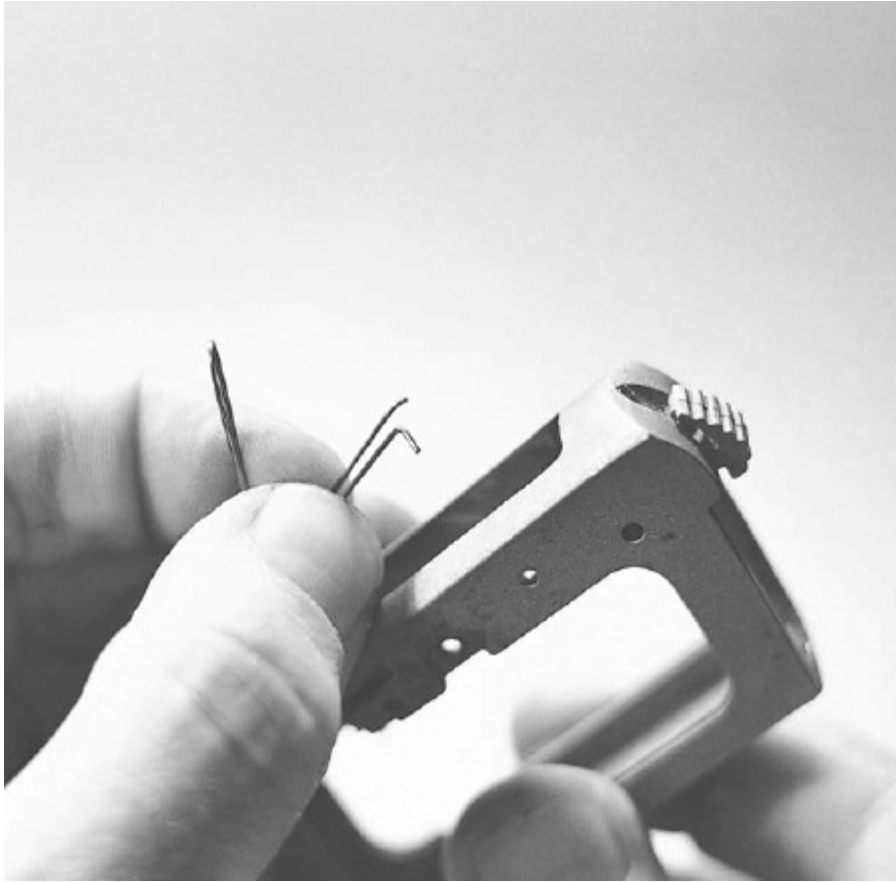
- 15.** Push out the pin, which retains the sear spring and the trigger bar spring. Before removal, note the position of the two springs to aid in reassembly.



- 16.** Drift out the cross-pin at the lower rear of the grip frame, and remove the magazine catch downward.



- 17.** Move the grip safety upward to clear its lower lugs from the frame, then remove it downward and toward the rear.



- 18.** The inner tips of the grip safety spring are locked into holes on each side within the backstrap. Squeeze the inner arms of the spring together to clear the tips from the holes, and remove the spring toward the rear.

Reassembly Tips:



1. When replacing the hammer and hammer spring assembly, be sure the spring and strut are attached to the hammer with the double curve of the strut in the orientation shown. When the hammer is in position, start the hammer pin through, then insert the ejector before pushing the hammer pin into place. As the hammer is inserted, be sure the lower tip of the spring strut enters the hole in the top of the magazine catch.



2. After the trigger bar/disconnector is back in place, insert a small

tool to re-engage the trigger bar spring with its groove in the rear lower edge of the bar.



- 3.** Note that the breechblock pin has a groove near one end. This groove must go on the left side of the gun, to engage the spring clip in the breechblock.

Accu-Tek XL-9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Accu-Tek XL-9 also apply to the following gun:

Accu-Tek BL-9



Data: Accu-Tek XL-9

Origin: United States

Manufacturer: Excel Industries, Chino,
California

Cartridge: 9x19mm (9mm Luger)

Magazine 5 rounds
capacity:

Overall length: 5.56 inches

Height: 4.18 inches

Barrel length: 3 inches

Weight: 24 ounces

Mechanically, the XL-9 is essentially the same as a BL-9, but in beautifully-finished stainless steel. Both pistols were made from 1997 to 2003. Simple and reliable, they were until recently the smallest 9x19mm in existence. I have been told that the XL-9 will be re-introduced soon, in a slightly revised version.

Field Strip:



1. Remove the magazine, and pull the takedown latch down until it stops.



2. Pull the slide all the way back, lift it at the rear, and move it off the frame toward the front. Except for repair, the recoil spring is best left in place on the barrel. It is tightly fitted at the rear.



Accu-Tek XL-9 field-stripped

Detail Strip:



3. The extractor and its coil spring are retained in the slide by a vertical roll-pin. If removal is necessary, use a proper roll-pin punch. The dovetail-mounted rear sight can be drifted out.



4. Fully depressing the firing pin safety block will release the firing pin for removal.



5. After the firing pin is taken out, the safety block and its coil spring can be removed. A hooked tool can be used to extract the firing pin rebound spring.



6. Remove the screw and take off the right grip panel. **CAUTION:** *The trigger spring may be released. Detach and remove the*

combination trigger and trigger bar spring.



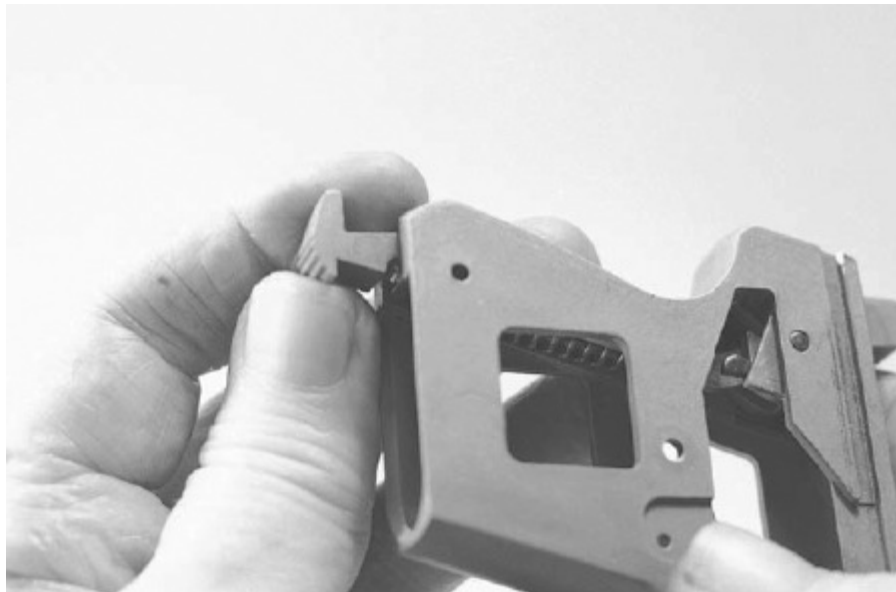
7. Remove the trigger bar.



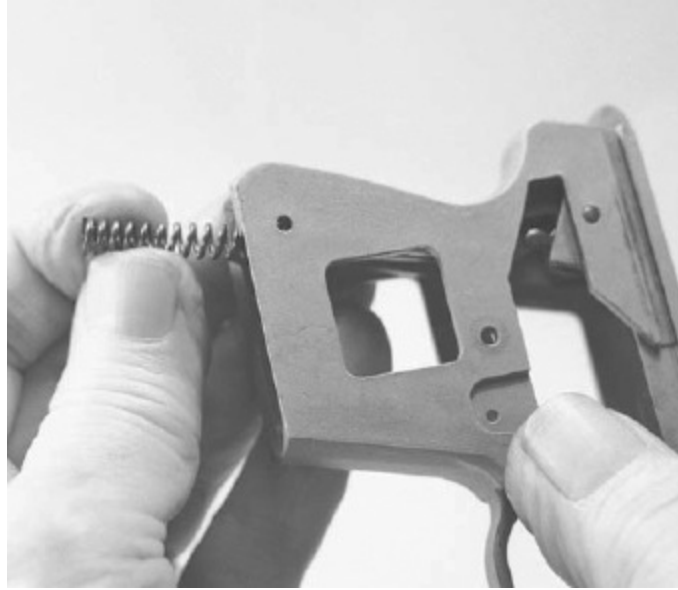
8. If necessary for repair, drift out the trigger pin and turn the trigger into the guard space for removal. The two pins above the trigger space are not removed in normal takedown.



- 9.** Remove the screw and take off the left grip panel. Restrain the magazine catch, and drift out the catch cross-pin. **CAUTION:** *Control the magazine catch as the drift punch is taken out. Note that the pin is a splined type, and must be drifted out toward the left.*



- 10.** Ease the magazine catch outward, and remove it.



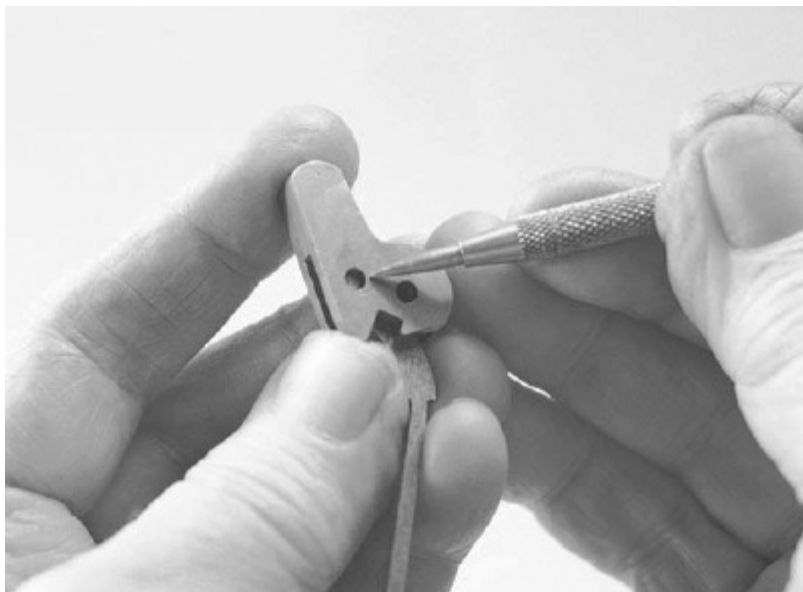
11. Remove the combination magazine catch and hammer spring.



12. Drift out the hammer cross-pin.



13. Remove the hammer, ejector, and firing pin block safety lever upward.



14. If necessary for repair, the hammer strut can be removed by drifting out the cross-pin.



15. The takedown latch detent ball and its powerful coil spring are staked in place. This system is not removed in normal disassembly.

Reassembly Tips:



1. When installing the ejector, hammer, and firing pin block lever, move the cross-pin across in increments as you put in each part.

Note that the hammer must stay vertical, to align the relief-cut in the hammer strut for passage of the pin.



- 2.** Insert a drift punch of the proper size to hold the magazine catch in place, as the pin is re-installed.



- 3.** The trigger bar and the combination spring are shown here in proper reassembly positions.

Astra Constable



Data: Astra Constable

Origin: Spain

Manufacturer: Astra Unceta Cia.
Guernica

Cartridge: 380 ACP

Magazine 7 rounds
capacity:

Overall length: 6¹/₂ inches

Height: 4³/₈ inches

Barrel length: 20 inches

Weight: 6¹/₂ ounces

Astra's double action medium-size automatic externally resembles the Walther, but its internal mechanism is entirely different. The Constable is also available in 32 ACP and 22 LR versions, with the latter, and the 380 chambering, being the most popular in the United States. The Constable has two things that the Walther lacks—an external slide latch, and a reasonable price. Quality of materials and workmanship are excellent.

Field Strip:



1. Remove the magazine and cock the hammer. The takedown-latch is located in the frame just forward of the trigger, with serrated wings at each side. Grasp the wings of the latch and pull it straight down, holding it there while the slide is drawn all the way back, lifted up at the rear to clear the barrel, and run

forward off the frame.



2. Remove slide from frame and barrel, and remove recoil spring from barrel. **Gun is now field-stripped.**



Astra Constable field-stripped

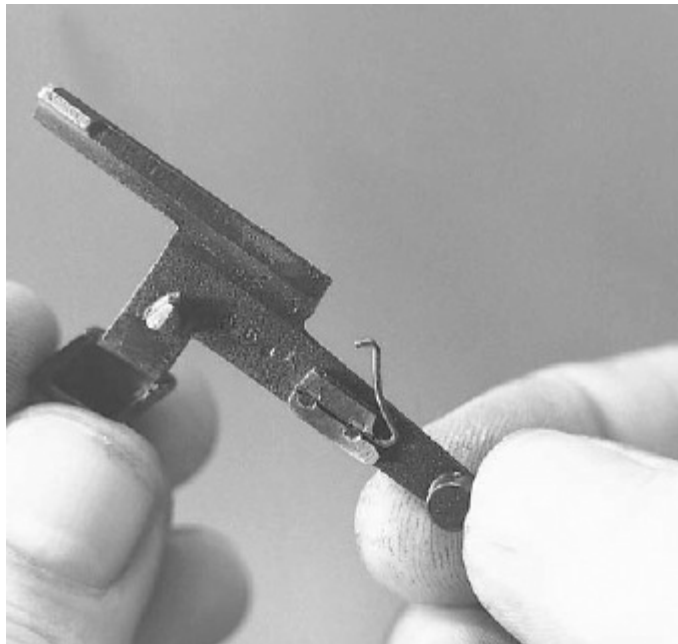
Detail Strip:



- 3.** With a drift punch, depress the firing pin (with the safety in the off-safe position) and nudge the safety toward the left side. If it is very tight, set the safety halfway between its two positions (while keeping the firing pin depressed), and try leftward pressure again. Remove the safety from the left side. The firing pin and spring will be released, and can be removed from the rear. The extractor can now be taken off, and the combination extractor and safety spring and its two plungers removed forward, from the extractor recess.



4. Use a small screwdriver to depress the slide latch spring and ease it from under its shelf on the frame. The slide latch can now be removed toward the left.



5. The slide latch spring is staked in place on the inside of the latch, and removal is not advisable except for replacement.



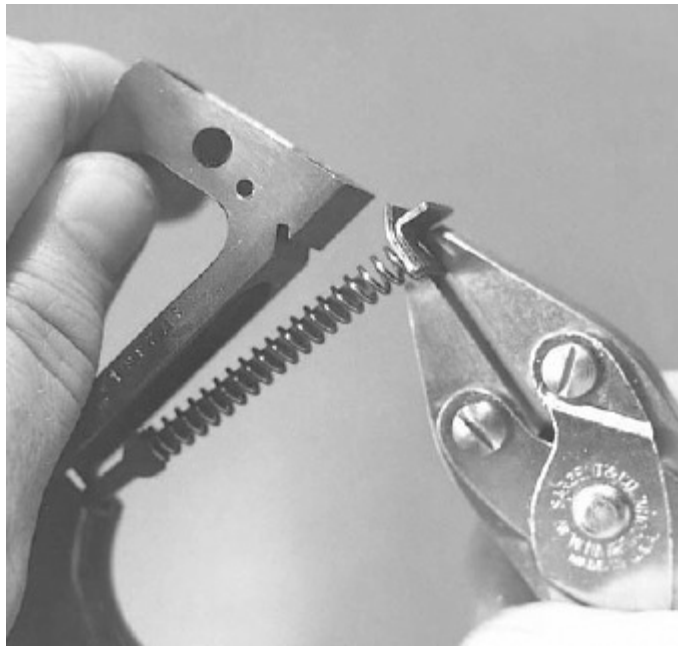
6. With the hammer lowered, depress the trigger bar to clear the safety disconnect and lift the bar off toward the right.



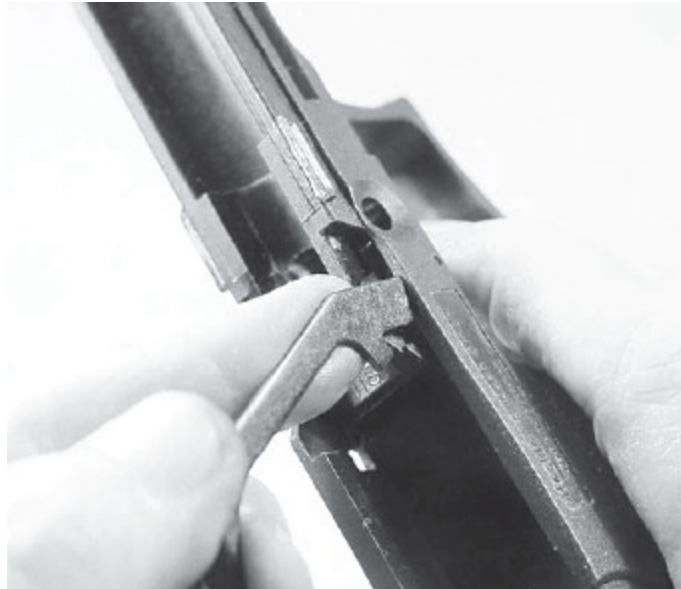
7. With a small screwdriver, pry the safety disconnect spring from its recess in the frame. Add one thing not shown in the photo for purpose of clarity—a fingertip over the spring to prevent its escape.



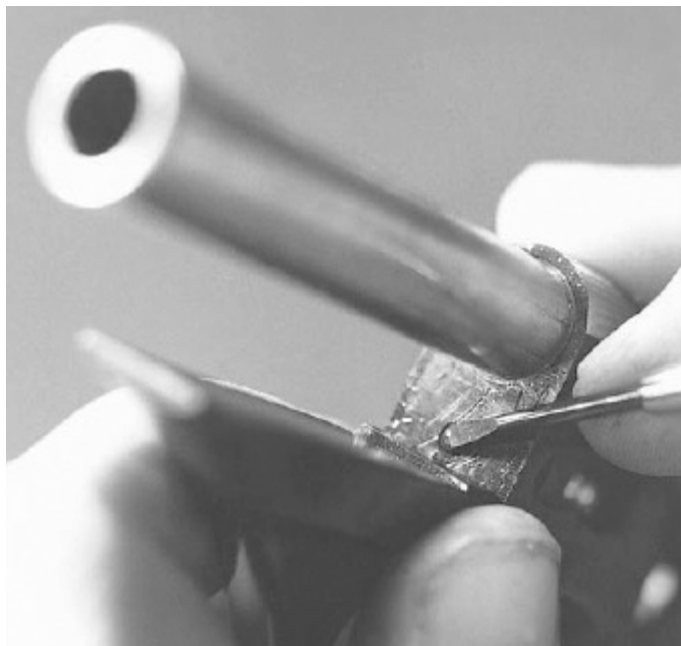
8. Slide the safety disconnect upward and off the frame.



9. Grip the hammer spring base with pliers and disengage it from its locking recess in the backstrap. **CAUTION:** *Spring is under tension. Ease it off, and remove spring and hammer strut from frame.*



- 10.** Drifting out the large pin at the top rear of the frame will free the hammer for removal from the top. The lower pin must be drifted out from right to left, and will release the sear and sear plunger for removal forward and downward. Take care not to lose the sear spring and plunger, housed in the left side of the sear.



- 11.** The takedown-latch can be removed by depressing and holding in the small plunger above it, and moving the latch upward and off

the frame.



- 12.** The trigger and its spring are retained by a cross-pin. The pin should be moved toward the left side. After this is drifted out, the trigger is taken out downward, into the trigger guard opening.



- 13.** There is a small retainer tab (arrow) just below the magazine catch button, level with the frame. Depress the retainer, and while holding it down unscrew the magazine catch button. Remove button, retainer, and spring from the left side, and the magazine catch piece from the right side.

Reassembly Tips:



1. To make replacing the trigger bar easier, insert a tool through the large opening on the left side and depress the long upper arm of the trigger spring, making sure that it is engaged beneath the inner stud of the trigger bar.

For replacing the safety lever on the slide, use a small tool to depress the plunger at the end of the safety well, holding the plunger in while the safety is moved into place.

When replacing the safety disconnect on the right side, insert the upper arm of its spring into the small hole in the part, then move the spring into its recess.

Astra 400

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Astra 400 also apply to the following guns:

Astra Model 300

Astra Model 600



Data: Astra Model 400

Origin: Spain

Manufacturer: Esperanza y Unceta.
Guernica

Cartridge: 9mm Bergmann-Bayard
(9mm Largo)

Magazine capacity: 8 rounds

Overall length: 8³/₄ inches

Height: 5¹/₄ inches

Barrel length: 5⁵/₁₆ inches

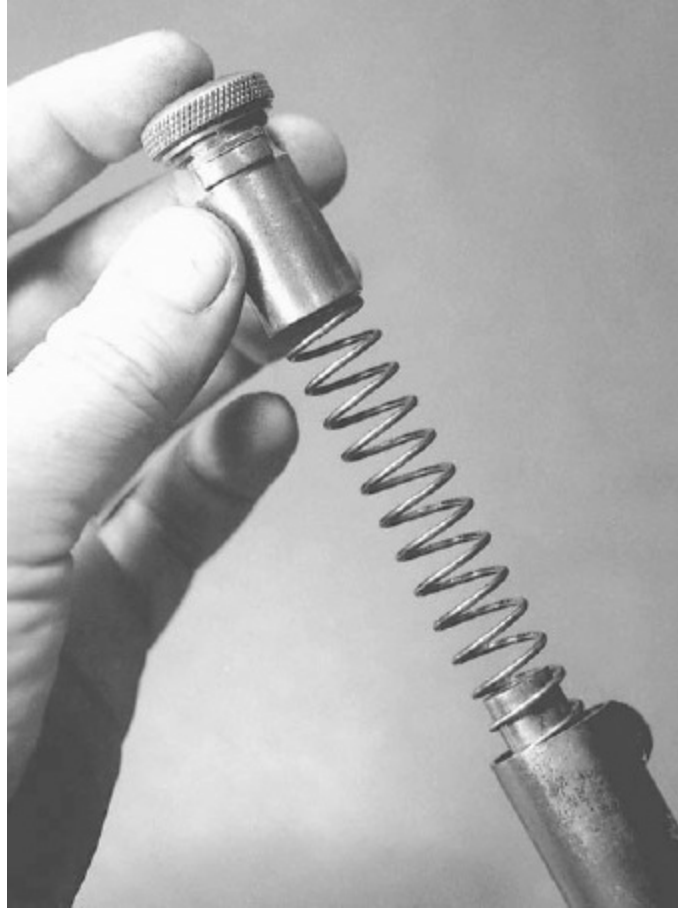
Weight: 33¹/₂ ounces

The Model 400 is also called the Model 1921, after the year of its adoption for use by the Spanish military. A shorter version, the Model 600, was chambered for the 9mm Luger round, and a smaller pistol, the Model 300, was made in 380 ACP and 32 ACP chamberings. The Model 600 and Model 300 had a different magazine catch, but they are otherwise mechanically identical to the Model 400 and the same general instructions apply.

Field Strip:



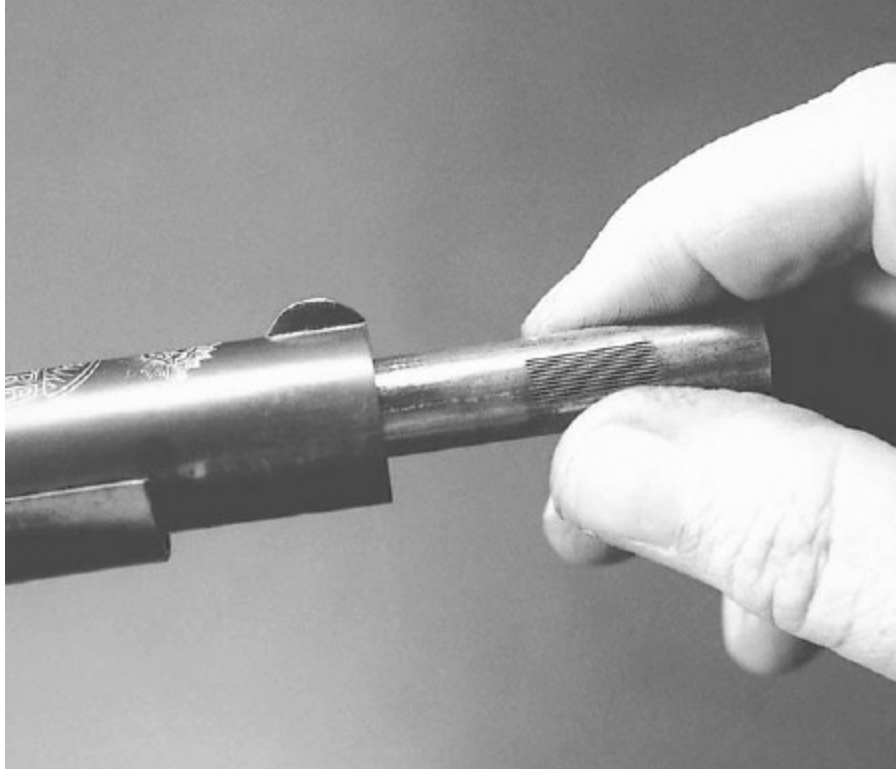
1. With the hammer down and the magazine removed, use a strong thumbnail or some other non-marring tool to depress the collar that surrounds the barrel at the muzzle. While holding the collar in, turn the knurled bushing at the front of the slide until the recoil spring forces the bushing and collar out toward the front. **CAUTION:** *The Model 400 has an extremely strong recoil spring, so keep a firm grip on the bushing as it is turned, aim it away from the face, and ease it out of the slide.*



2. Turn the barrel back to original position, and pull it forward out of the slide.



- 3.** Move the slide all the way to the rear, then move it forward while pushing the safety-lever upward toward the rear, to the on-safe position. The inner arm of the safety-lever will catch and hold the slide in the position shown.



4. Turn the barrel to the left (front view) as far as it will go.



5. Pull the slide to the rear to clear the safety, or manually turn the safety down to the off-safe position, and run the slide assembly forward off the frame. Turn the barrel until its retaining lugs are visible at the underside of the slide, and remove it toward the front. **Gun is now field-stripped.**



Astra 400 field-stripped

Detail Strip:



- 6.** On the 22 version, use a small screwdriver to put out the shaped head of the extractor pivot, releasing the extractor and its spring. The 25-caliber version has a vertical roll pin for an extractor pivot, and this is driven straight downward to remove.



- 7.** The firing pin on the 22 version is retained by a slanting cross-pin, its outer head visible here on the left rear of the slide.

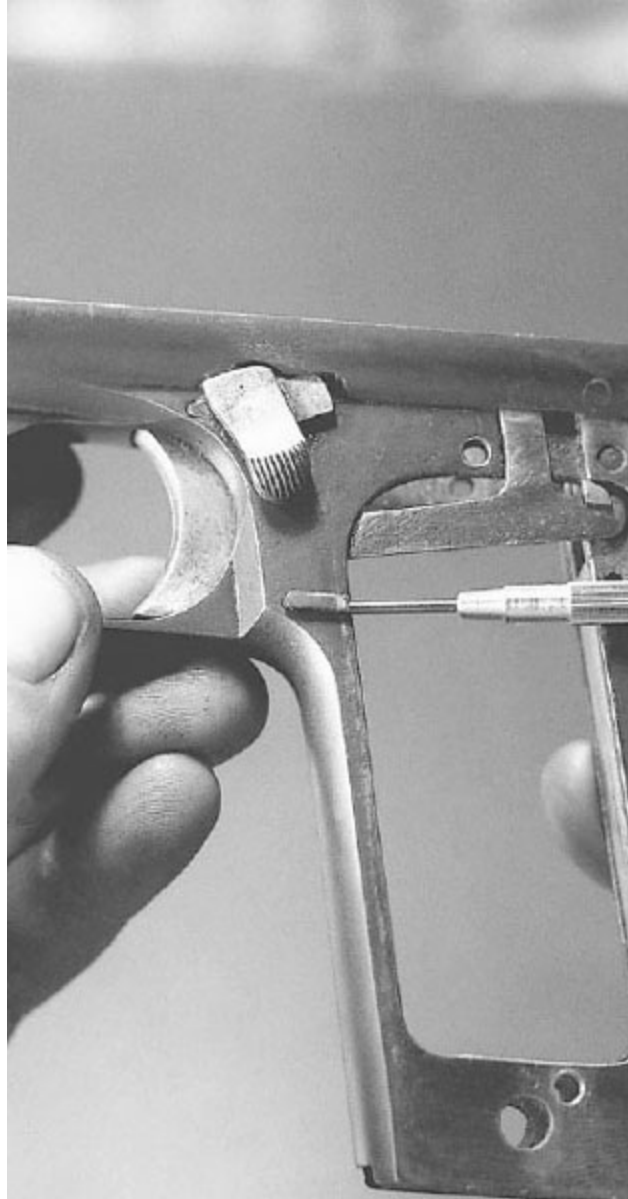


- 8.** After removing the grip panels, cock the hammer and insert a

small tool into the hole on the left side of the frame, just below the rear tip of the trigger bar. Restrain the hammer, pull the trigger to release it, and let it down slowly. If the tool has been inserted to the proper length, the hammer spring and plunger will be trapped in the frame and tension on the hammer relieved. The hammer pivot can be drifted out the right and the hammer removed from the top of the frame. Note that the right end of the hammer pivot pin is also the base for the slide hold-open spring, and this spring can also be removed in this operation. To remove the mainspring and plunger, insert a tool into the top of the frame to bear firmly on the plunger, depress it slightly, and remove the keeper tool from the hole on the left side. **CAUTION:** *The spring is under tension. Use care, and ease the spring and plunger out for removal toward the top of the frame.*



9. With the safety-lever in the off-safe position, remove it by simply pushing it toward the left side and taking it out of the frame. **CAUTION:** *As the safety is taken out, its spring and plunger will be released from a vertical hole in the top right of the frame. Hold a fingertip over the hole to restrain them, as shown, then remove them from the frame.*



- 10.** With a small screwdriver, pry out the pin at the lower rear of the trigger and remove it toward the left. This will release the magazine safety and its spring to be removed to the rear, into the magazine well.



- 11.** If the hammer pivot has not been removed, pry the slide hold-open spring out and down, and detach it from the hold-open block toward the rear. The spring retains the block, and the block can now be slid straight up and out of the frame.



- 12.** The small cross-pin at the lower rear of the grip frame is the limit pin for the magazine latch. It is visible here within the lanyard loop, and its location makes driving it completely out toward the right impossible. Fortunately, it has an enlarged head on the right side, and it is only necessary to start it with a punch. It can then be pried out and removed with the fingers on the right side. The larger pin retains the magazine catch and grip safety. Drift it out to the right and remove the catch and grip safety downward.

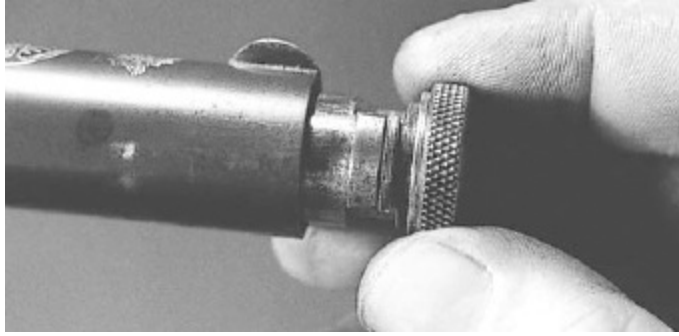


- 13.** After the hammer has been removed, only the stop at the rear tip of the trigger bar keeps the sear and sear spring in the frame. Pull the trigger bar downward and slide the sear forward into the magazine well, along with the small coil spring behind it.



- 14.** After the safety-lever has been removed, the trigger pin can be pried out toward the left, and the trigger and trigger bar moved to the rear for removal. It will be necessary to spring the trigger bar slightly out (toward the left) to clear the side of the frame as the trigger assembly is moved to the rear. When the trigger is out of the gun, the small pin at the lower rear of the trigger can be drifted out to free the trigger bar. **CAUTION:** *This will also free the plunger and spring from inside the trigger, and the spring is under compression. Restrain them from escape, and ease them out.*

Reassembly Tips:



1. When replacing the barrel bushing and barrel collar or sleeve, align their locking lugs on each side before pushing the assembly into the slide. If this is done, they can be pushed straight in, the bushing turned, and the collar will move forward to lock it in place.



2. When replacing the safety in the frame, use a small screwdriver to depress the safety spring and plunger, holding them down while the safety is pushed in toward the right.

Note that all of the L-pins are not of the same size or length. Keep them with the parts they retain during disassembly, to insure that they will be used again in the right location.

During reassembly, take care when compressing the mainspring (hammer spring) and recoil spring, as both are extremely strong. If accidentally let go they could cause physical harm.

Bayard Model 1908



Data: Bayard Model 1908

Origin: Belgium

Manufacturer: Anciens Etablissements
Pieper, Herstal

Cartridge: 7.65mm Browning
(32 ACP)

Magazine capacity: 5 rounds

Overall length: $4\frac{13}{16}$ inches

Height: $3\frac{1}{2}$ inches

Barrel length: $2\frac{13}{16}$ inches

Weight: $16\frac{1}{2}$ ounces

The little Bayard was offered first in 32 ACP, and most of them seen will be in that chambering. A 380 ACP version came along in 1911, and a 25 ACP in 1912. They are mechanically the same. Very early pistols, recognizable by a single grip screw, have slight mechanical differences, but these will not cause any difficulties in takedown.

Field Strip:



1. With the internal hammer in cocked position and the magazine removed, move the takedown key, which is also the front sight base, rearward and lift it at the front. **CAUTION!** *Control the recoil spring.*



2. Remove the takedown key/front sight, and take out the recoil spring and its guide.



3. Move the slide all the way to the rear, and take it off upward.



Bayard Model 1908 field-stripped

Detail Strip:



4. Many Bayard extractors are broken during removal or installation, so take it off only if necessary. Use a tool at the front to lift it just enough to clear its retaining stud, and gently lever it forward until its wings at the rear align with the exit cuts in the breech block. Then, take it off toward the right.



5. Drifting out this cross-pin will release the firing pin and its return spring within the slide, but actual removal requires one more operation.



6. If the firing pin and its spring are to be taken out of the slide, drift out this cross-pin at the rear, and remove the small end-plug from the slide. This is a “finished-over” part, and some disturbance of the finish will be inevitable.



- 7.** The large pin at the rear of the slide retains the main endpiece, also “finished-over”, and no other parts. Do not remove it.



- 8.** In the rear end of the recoil spring housing, the retainer for the buffer and its spring can be unscrewed with an ordinary screwdriver. However, this part is factory-staked, and should be taken out only for repair or refinishing.



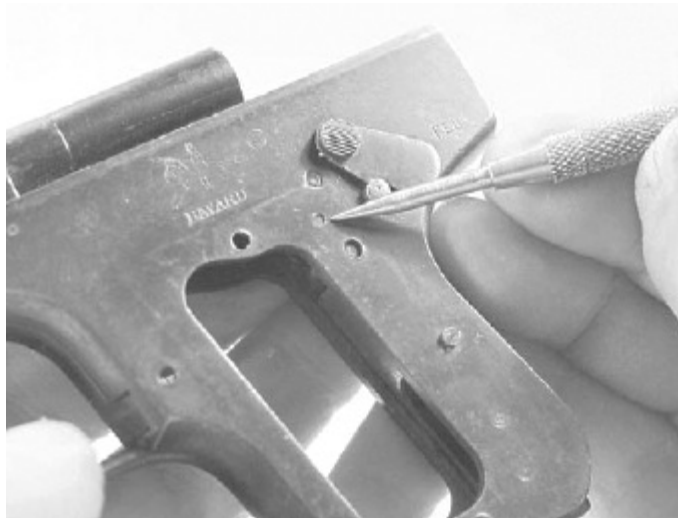
- 9.** Insert a tool inside the frame to press down the front of the secondary sear, the part to the left, forward of the hammer. Restrain the hammer, pull the trigger, and ease the hammer down to fired position. Remove the grips. Drift out the trigger pin.



- 10.** Move the trigger forward, then tilt it toward the right for removal.



- 11.** The sear trip in the trigger can be removed by drifting its cross-pin out toward the right but this pin is usually riveted in place. So, remove it only if necessary. The same can be said for the small blade spring that powers the trip.



- 12.** Drift out the small pin indicated to relieve the tension of the sear spring and the secondary sear spring.



13. Drift out the secondary sear cross-pin toward the right.



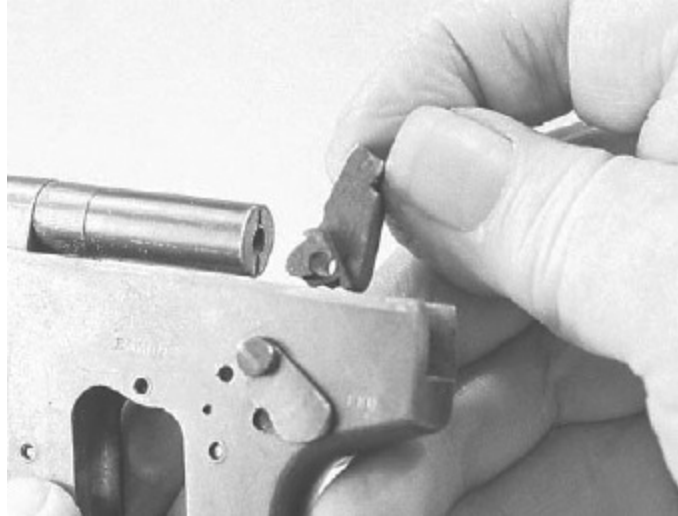
14. Remove the secondary sear.



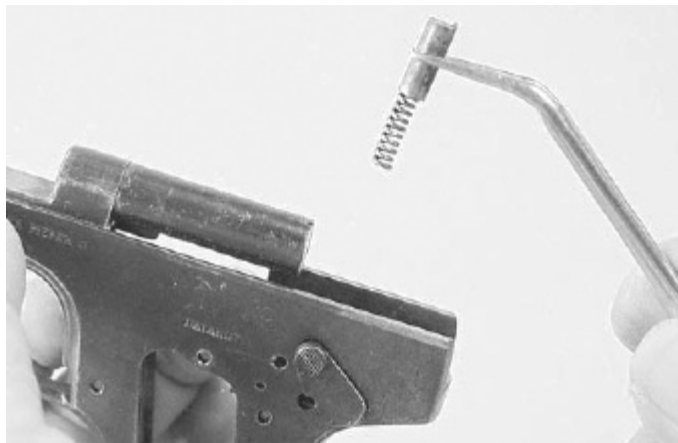
- 15.** Remove the secondary sear spring. Note that the pin and spring are similar to the sear pin and spring, but they are not identical, so keep them with the secondary sear for proper reassembly.



- 16.** Insert a tool into the frame to slightly depress and restrain the hammer spring plunger, and push out the hammer pivot pin.



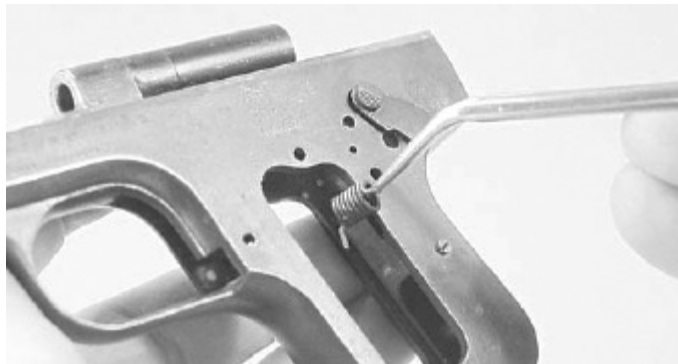
17. Remove the hammer.



18. Remove the hammer plunger and spring. The spring may not come out with the plunger. If not, extract it with a tool.



19. Drift out the sear cross-pin toward the right.



20. Remove the sear spring.



21. Remove the sear.



22. Turn the safety lever to exactly the position shown. Do not exert any pressure on the external lever. Use a tool inside the frame to push it out.



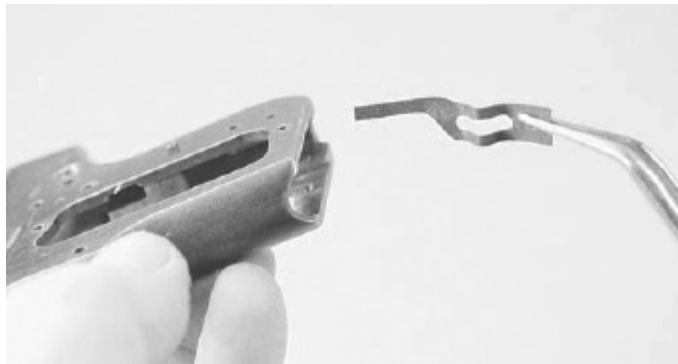
23. Drift out the magazine catch limit pin.



24. Drift out the magazine catch pivot pin.



25. Remove the magazine catch, forward and downward.



26. Tilt the combination trigger and magazine catch spring forward, then take it out downward.



- 27.** This tiny screw is threaded directly into the base of the safety detent spring. The spring is tightly fitted, and removal should not be attempted except for repair. If this is necessary, take out the screw and insert a tool from below, inside the frame, to gently pry the spring out of its recess.

Reassembly Tips:



- 1.** When installing the hammer spring plunger, note that the “lip” on top goes toward the hammer, to engage inside the lobe on the

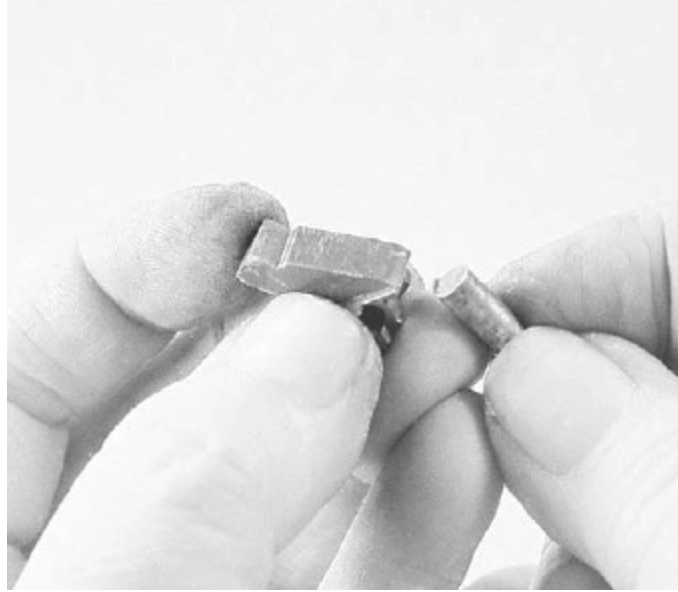
back of the hammer. During hammer installation, the safety must be in off-safe mode. The hammer pivot must protrude slightly on the left side, as it acts as a stop for the safety lever.



- 2.** For illustration purposes only, the sear and its spring are shown as they should be when reassembled.



- 3.** Again, for illustration only, the secondary sear and its spring are shown as they should be when properly assembled in the frame.



4. When installing the safety lever, insert a tool at the top of the frame to slightly flex the end of the detent spring out of the way. Keep the smooth side of the cross-shaft next to the spring, and put no stress on the external lever.

Benelli B76

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Benelli B76 also apply to the following guns:

Benelli B77

Benelli B80

Benelli MP-3



Data: Benelli Model B76

Origin: Italy

Manufacturer: Benelli Armi, Urbino

Cartridge: 9mm Luger (Parabellum)

Magazine capacity: 8 rounds

Overall length: $7\frac{3}{4}$ inches

Height: $5\frac{7}{16}$ inches

Barrel length: $4\frac{5}{16}$ inches

Weight: 34 ounces

The Benelli has a unique locking system, with a fixed barrel and a separate internal breechblock which is lever-cammed by the slide into a locking recess in the frame. This may sound complicated, but it isn't. Another unique feature of the Benelli is the trigger bar, which pushes the hammer back in double-action firing. In other double-action pistols, this part is usually a drawbar, pulling the bottom of the hammer forward. There are several other internal design points that are unusual, and anyone completely disassembling the Benelli should carefully note the relationship of all parts before beginning takedown. The Benelli pistols in other calibers, the B77, B80, and MP-3, have the same basic mechanism, and the instructions will apply.

Field Strip:



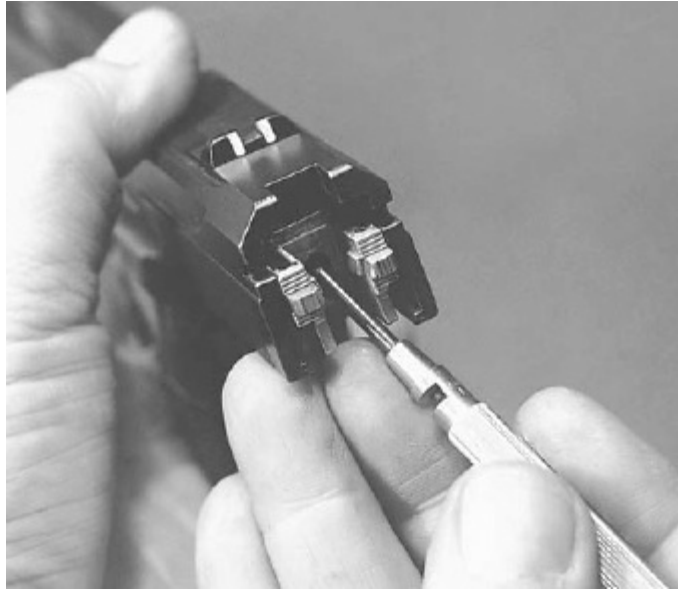
1. Remove magazine, and pull slide all the way to the rear, locking it open by pushing the safety up to the on-safe position.



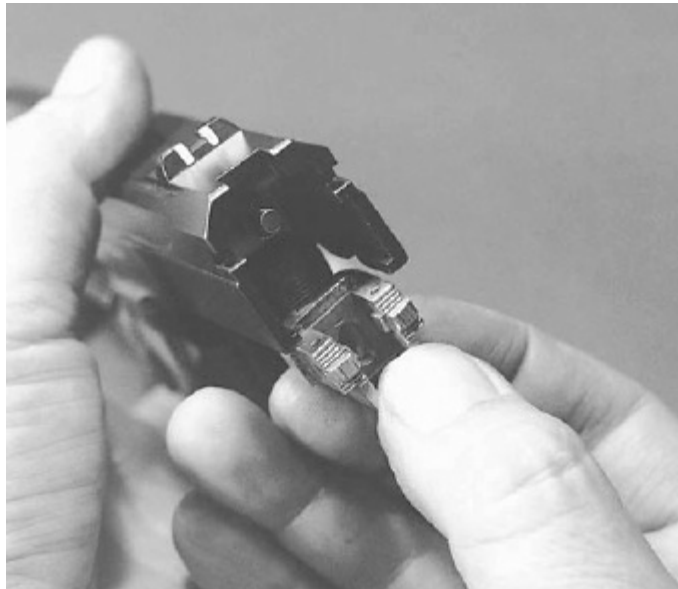
2. With a small screwdriver or other tool of appropriate size, turn both of the locking piece support levers inward until they are clear of their recesses in the slide. The rear edge of the magazine bottom can be used for this, but there is a possibility the slide may be scratched, so use of a proper tool is advisable.



3. When both locking-piece support levers are in position for takedown, they will look like this, from the rear.



4. With a small screwdriver, a drift punch, or any other tool of appropriate size, depress the firing pin head and move the locking support piece downward.



5. Remove the locking-piece support piece from the bottom of the slide. There is a slight possibility that the firing pin may be

released at this point, but in most cases it will remain in the breechblock. For safety, cover the area with your hand to prevent the firing pin from flying out of the slide.



6. Holding the slide against the recoil spring tension, release the safety and allow the slide to run slowly forward off the frame.

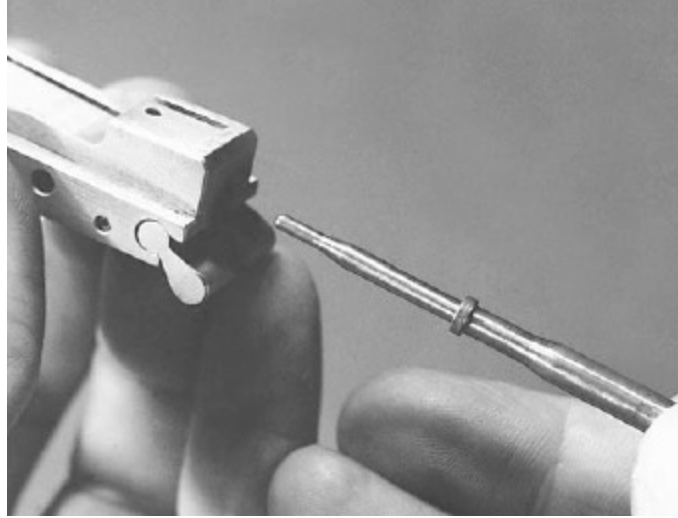


7. Lift the breechblock from its locking recess in the frame (actually, the recess is a part of the barrel extension, or sub-frame). **Gun is now field-stripped.**



Benelli B76 field-stripped

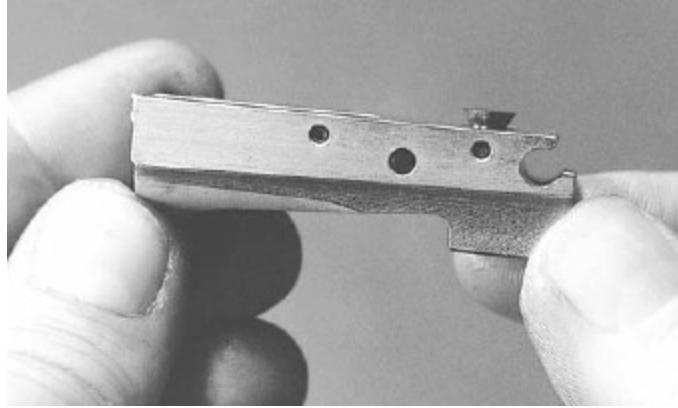
Detail Strip:



- 8.** Rotate the firing pin (either direction) until it moves toward the rear of the breechblock and can be withdrawn. The firing pin spring may or may not come out with the pin, but if not, it should fall from its tunnel when the block is elevated to vertical.



- 9.** The breechblock toggle lever can now be moved out to either side and removed.



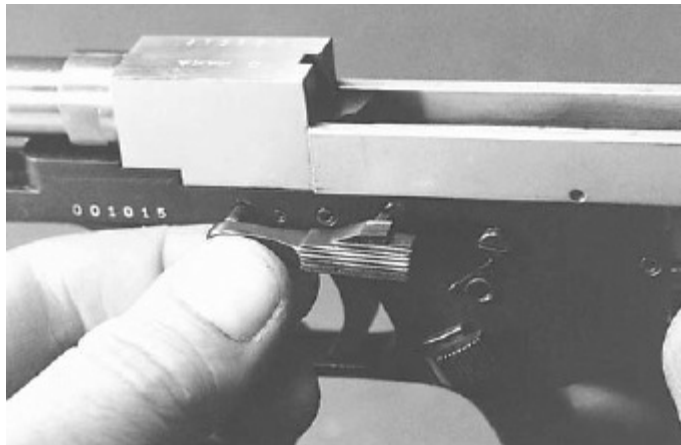
- 10.** Driving out the small pin at the left will release the extractor for removal. The large pin at center is the locking shoulder for the firing pin collar, and need not be removed. The small pin at the right retains the breechblock control stud and its removal isn't necessary as it retains no other part.



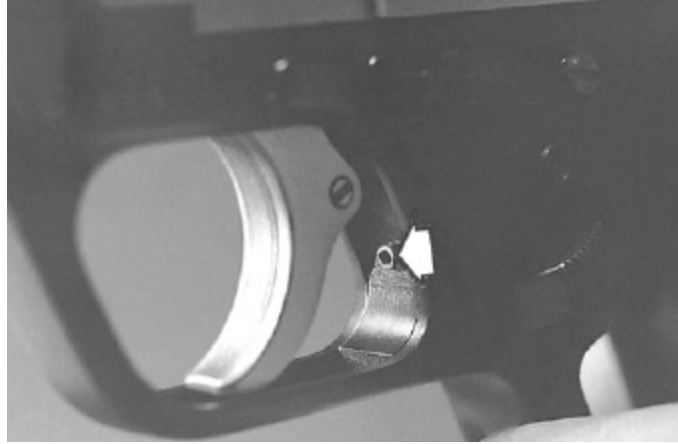
11. The recoil spring system can be dismantled by removal of a small split-ring clip at its forward end (arrow). **CAUTION:** *Springs are under tension, so remove carefully.* Note the arrangement of the springs and attendant parts before disassembly, to be sure they are replaced in the same order.



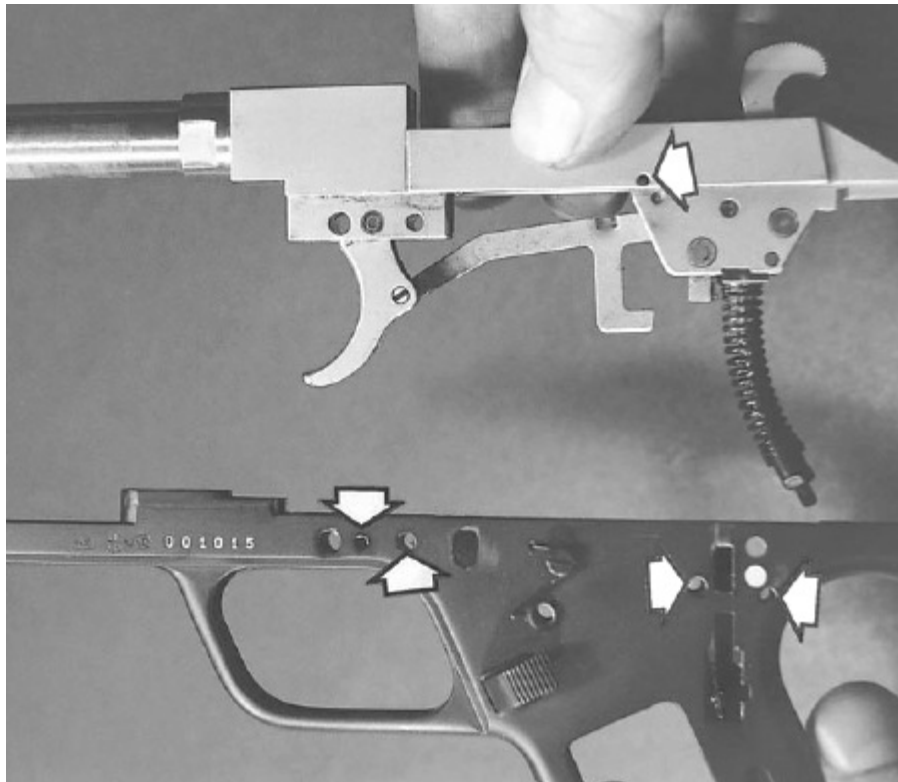
- 12.** After the grips are removed, move the safety down past the off-safe position and lift it off the frame to the left.



- 13.** Pull the slide latch straight out to the left and remove it. The slide latch spring will slip out of its slot as the latch is removed. The spring is retained on the side of the frame by a single screw.

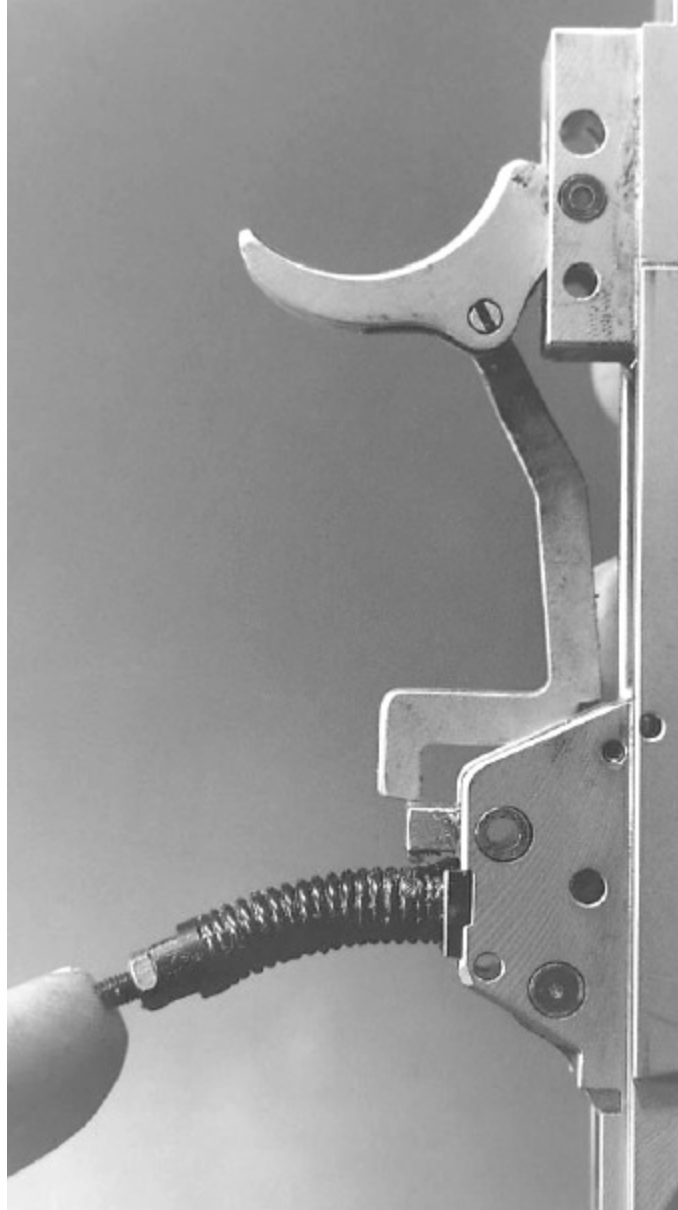


- 14.** Driving out a small cross-pin at lower rear of the trigger will free the magazine safety and its spring. The trigger is also held by a cross-pin, and after this is removed, the trigger is taken out toward the rear, along with its connector bar.



- 15.** After the slide latch is taken off, the removal of five rolled-steel pins will free the sub-frame, which is then taken out upward from the grip frame. Note that the five sub-frame pins are not all

the same size or length. Lay them out in order when they are removed, and be sure that each is returned to its original location. One pin passes through the trigger pivot, another is just to the rear of the trigger pivot. A smaller pin is at the top, in the lower edge of the sub-frame at its center. The last two are located on each side of the safety slot in the grip frame. The sub-frame may be tightly fitted, and should be pried gently upward at the front, in the area between the rear portion of the barrel and the top of the grip frame, then at the rear as soon as there is space to insert a tool. The hammer must be cocked for removal. After the sub-frame is clear of the grip frame, it is advisable to lower the hammer by pressing the sear, because the sear spring is mounted in the grip frame, and the sear is easily tripped. Do not let the hammer fall freely—ease it down.



- 16.** A split-end cross-pin holds the trigger spring inside the trigger, and also retains the trigger bar on the right side. The trigger and sear are held by hollow pivot pins, while the hammer has a solid pivot pin at the rear of the sub-frame. All three of these must be pushed out from right to left. Before removing the hammer pin, turn off the hammer spring nut and remove the spring and its collar from the hammer tail, along with the compression plate at the top. A small roll pin near the center pin of the sub-frame holds the ejector. The sear spring is not in the sub-frame, it is

mounted in the grip frame.

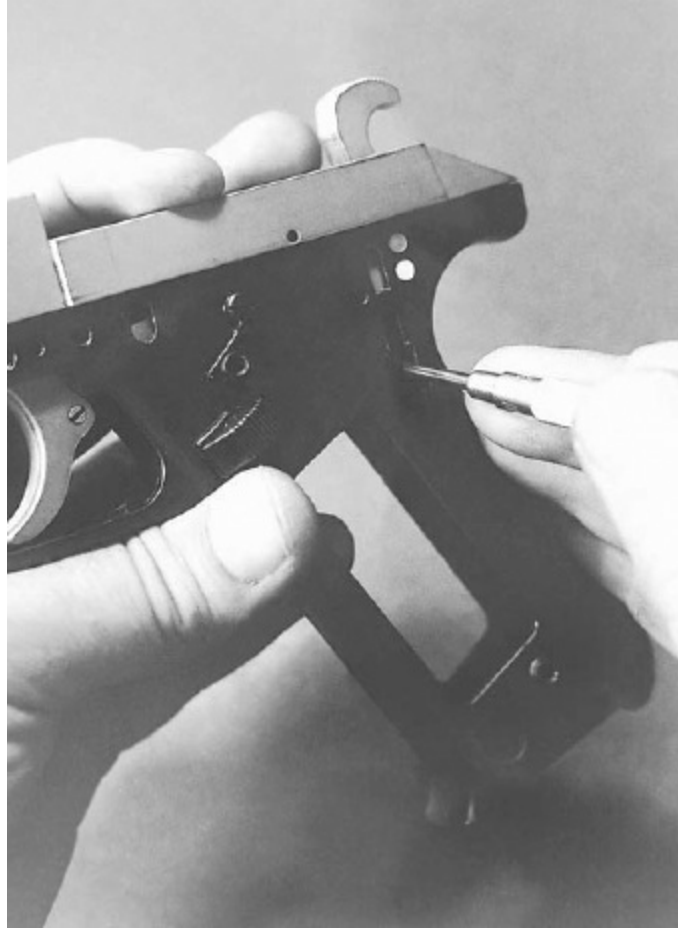


17. At the lower rear of the grip frame, the upper pin retains the sear spring, the lower one holds an end plug piece. At the upper rear of the grip frame there is a rubber buffer which cushions the hammer during recoil, and this buffer is easily pried from its recess. The magazine release is retained by a split-ring spring clip on the right side. When this clip is forced off its groove in the end of the magazine catch crosspiece, the round, curved, catch-spring comes off to the right, and the catch is removed to the left.

Reassembly Tips:



1. When replacing the sub-frame unit in the grip frame, cock the hammer, setting the sear in place (forward) by hand. Push the trigger bar down to disengage it from the sear, and pull trigger all the way to the rear, holding it there. Insert the hammer spring assembly into the grip frame, being sure that the sear spring engages properly behind the sear. Press the sub-frame down at the rear, then at the front, fitting it to its steps in the grip frame. Make final adjustments by tapping it gently into place with a nylon or plastic hammer, but use no extreme force.



2. To insure that the sear spring properly engages the sear, insert a small tool through the safety-lever opening in the grip frame, and pry the spring slightly toward the rear while pushing the sub-frame into place.

Although the barrel is removable by unscrewing with a metric wrench of the proper size, taking it out of the sub-frame is not advisable. If it has been removed, take care that it is turned back into the proper depth, precisely aligning the extractor recess at the top with the matching recess in the barrel block on the sub-frame.

When replacing the slide latch, cock the hammer to clear the trigger top from the slide latch tunnel in the frame.

Beretta Model 84

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Beretta Model 84 also apply to the following guns:

Beretta Model 81

Beretta Model 85

Beretta Model 87



Data: Beretta Model 84

Origin: Italy

Manufacturer: Armi Beretta S.p.A.,
Gardone (Brescia)

Cartridge: 380 ACP

Magazine capacity: 13 rounds

Overall length: 6³/₄ inches

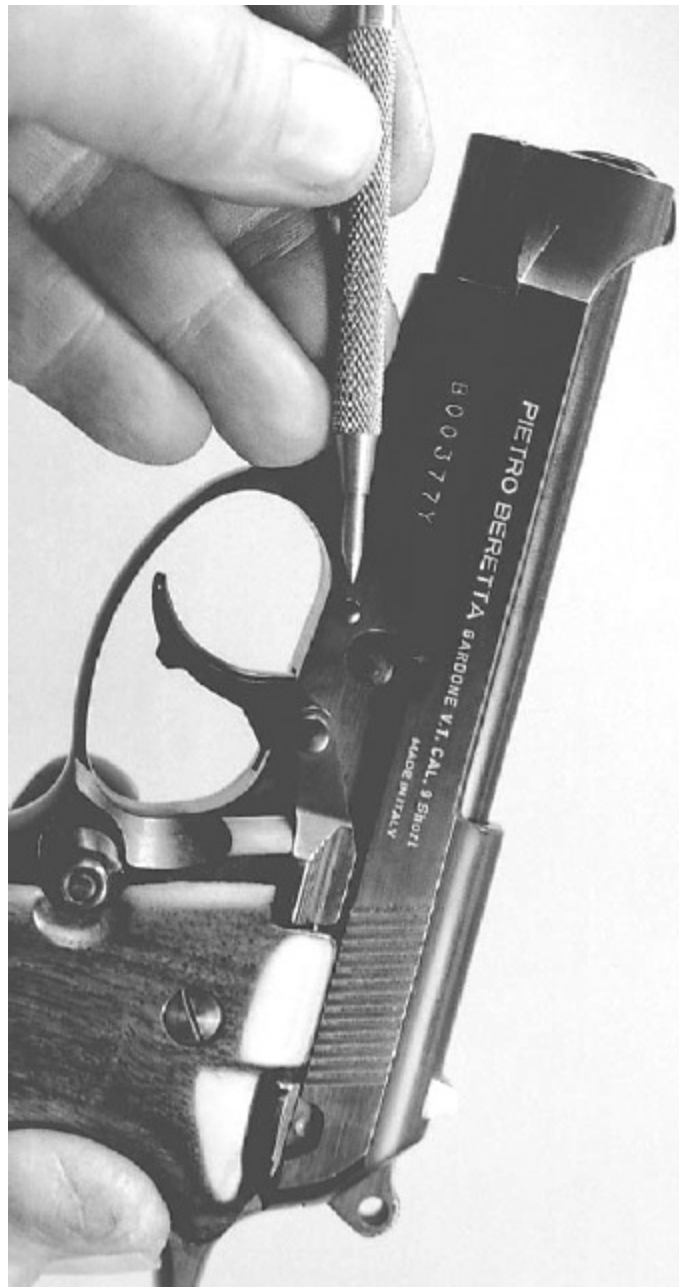
Height: 4³/₄ inches

Barrel length: 3⁷/₈ inches

Weight: 23 ounces

The Beretta Model 84 combines the traditional Beretta style with a number of modern design innovations. It has a double-action trigger system, ambidextrous safety, and a reversible magazine catch for left-handed shooters, along with a capacious 13-round magazine. A companion gun, the Model 81, is identical mechanically, but is chambered for the 32 ACP cartridge. Although it has many features, the pistol is not unnecessarily complicated. While there are some small differences, the instructions can also be generally applied to the 380-caliber Model 85 and the 22 Long Rifle Model 87.

Field Strip:



1. The takedown-latch release button is located on the left side of the frame, just forward of the trigger. Remove the magazine, and leave the hammer at rest.



2. The takedown-latch is located on the right side. Push the latch release button and turn the latch down to the position shown.



3. The slide assembly can now be run forward off the frame.



4. Push the recoil spring guide forward, lift it at the rear, and remove the guide and spring from the slide.



5. Move the barrel slightly forward, and remove it from the bottom of the slide. **Gun is now field-stripped.**



Beretta 84 field-stripped

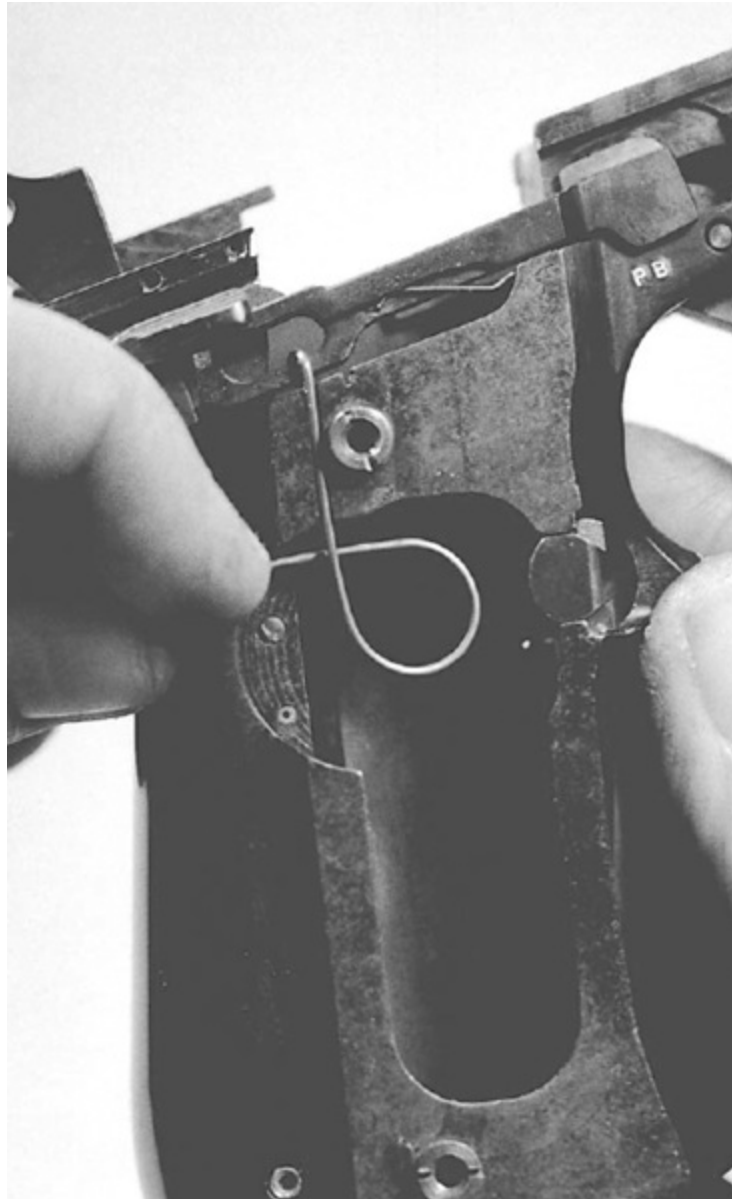
Detail Strip:



6. A vertical pin in the slide retains the extractor and its spring, and the extractor pivot lug retains the firing pin and its spring. The pin should be drifted out toward the top.



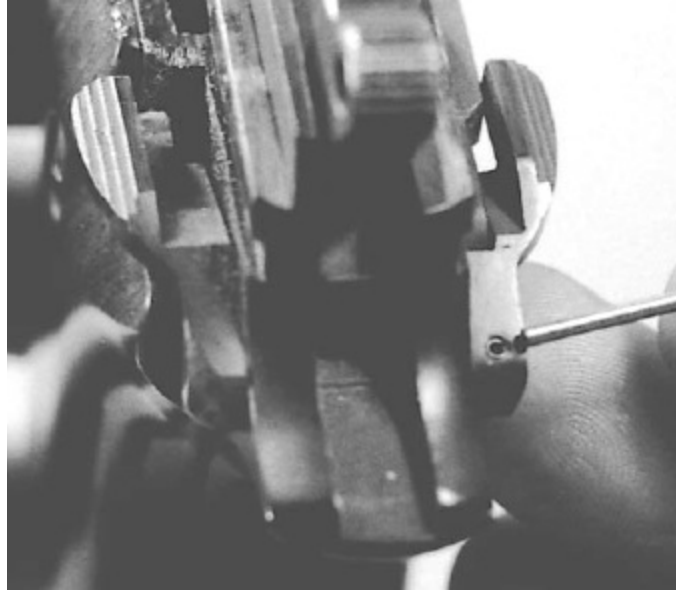
7. The magazine safety is a round-wire torsion spring located on the right side of the frame, hooked into an opening in the trigger bar.



8. To remove the magazine safety spring, flex its lower arm out of its recess in the frame and move the lower loop of the spring outward.



9. Turn the spring to free its upper hook from the opening in the trigger bar, and remove the spring to the right.



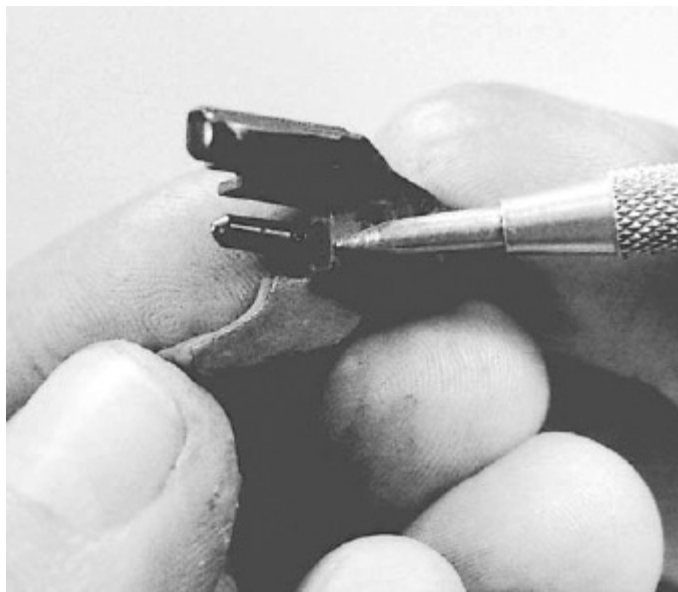
- 10.** The right safety-lever is retained on the cross-shaft of the safety by a vertical roll pin. Use a roll pin punch to remove it.



- 11.** When the pin is driven out, the right safety-lever can be removed toward the right.



- 12.** With the hammer cocked, remove the left safety-lever and its cross-shaft toward the left. **CAUTION:** *As soon as the safety clears its spring-post, the internal spring and plunger will be released.* Keep a fingertip in front of the safety, as shown, to prevent their escape.



- 13.** The positioning spring and plunger are mounted inside the left safety-lever. Take care that these small parts are not lost.



- 14.** Removal of the trigger bar will also release the trigger, allowing it to move forward for easy removal. Take care not to lose the small trigger spring.



- 15.** Before removing the safety-lever, take note of the position of the combination sear and trigger bar spring inside the frame, as it will be released when the safety is removed. Turn the safety-lever

into near vertical position, and pull it out toward the left side of the frame.



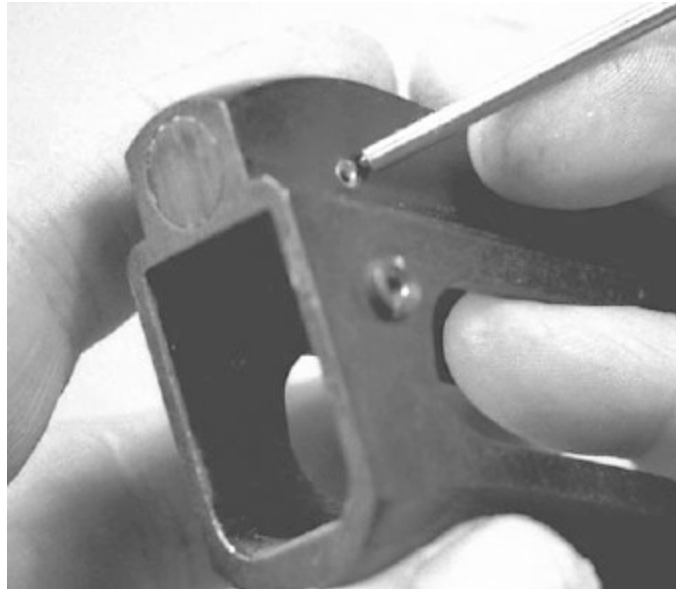
- 16.** Move the slide latch slightly to the left, and use a small screwdriver to disengage its spring from the recess on the frame. When the spring is free, remove the slide latch toward the left side.



- 17.** The cross-shaft of the slide latch is also the trigger pivot, and the trigger spring can now be removed from the top of the frame. The forward tip of the trigger spring also powers the takedown-latch release button, and the release will not probably fall out of its recess in the gun or can now be removed toward the right.



- 18.** The trigger can now be removed downward, into the interior of the guard.



- 19.** A roll pin at the lower rear of the grip frame retains the frame plug, which is also the hammer spring base. After the pin is removed, the base can be pushed down and out by cocking the hammer.



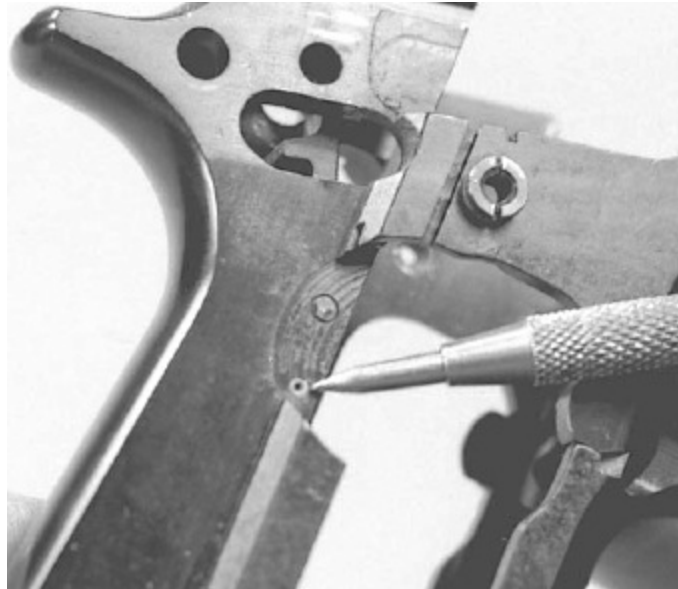
- 20.** Removal of the spring base plug will make hammer removal easier, but is not absolutely necessary. If the plug is still in place, restrain the hammer while removing the hammer pivot, as the spring is under some tension even when the hammer is at rest.



21. Remove the hammer from the top of the frame.



22. Remove the hammer strut and spring from the top of the frame.



- 23.** The small roll pin at the rear of the magazine well is the compressor for the sear spring and driving it out will release sear spring tension. The larger solid pin above it retains the sear and its spring, and these parts are removed forward, into the magazine well.

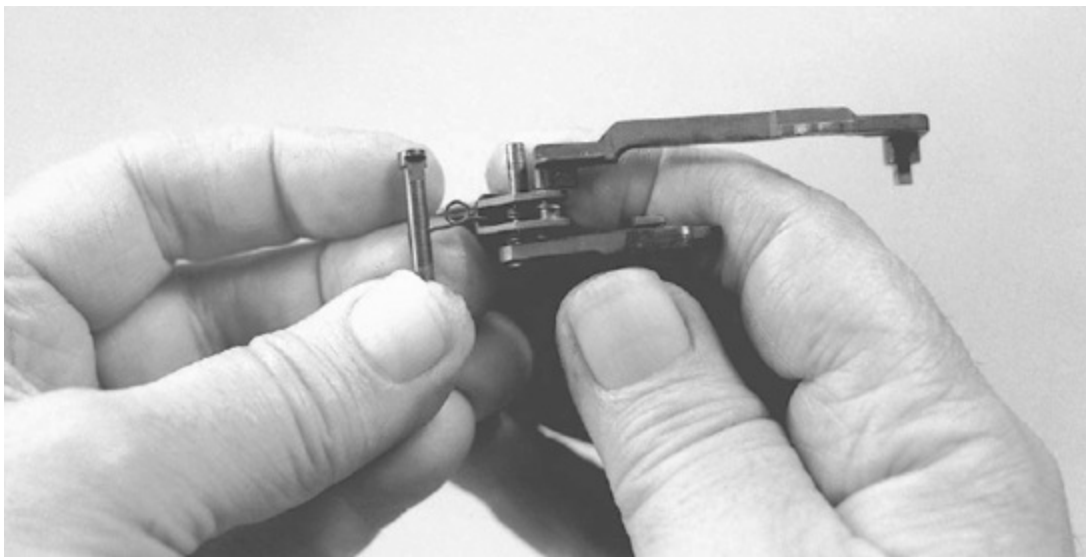


- 24.** The two small roll pins at the top of the frame retain the ejector and its base, removable from the top of the frame.



- 25.** To remove the magazine catch, use a small screwdriver to pry the longer of its two internal blocks, the one of the left, toward the right while pushing on the right end of the magazine catch. When the right end of the catch will clear the internal shoulders of the frame, swing it back into the magazine well and remove it.

Reassembly Tips:



- 1.** The trigger, trigger spring, trigger bar, slide latch, and takedown

release are shown in the positions they occupy in the frame. When installing the trigger bar, be sure the rear arm of the trigger spring is lifted to bear on the internal pivot of the bar. Also, be sure the forward tip of the trigger spring enters its hole in the takedown release. Unfortunately, the parts cannot be pre-assembled as shown. They must be put into the frame separately.

When replacing the left safety-lever on the frame, use a small screwdriver to depress the spring and plunger until they can bear on the post. Take care that they don't escape.

When replacing the magazine catch, put the left end back into the recess, with the inner shoulder of the left spring block bearing on its recess in the frame. Push the catch toward the left, compressing the spring, and swing the right left-handed operation, reverse the direction of the catch, and install it from the opposite side.

Beretta Model 92S

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Beretta Model 92S also apply to the following guns:

Beretta Model 92

Beretta Model 92F

Taurus Model PT99

Beretta Model 92SB

Taurus Model PT92

Taurus Model PT99AF

Beretta Model 92SBC

Taurus Model PT92AF



Data: Beretta Model 92S

Origin: Italy

Manufacturer: Armi Beretta, S.p.A.,
Gardone (Brescia)

Cartridge: 9mm Luger
(Parabellum)

Magazine capacity: 15 rounds

Overall length: 8¹/₂ inches

Height: 5³/₈ inches

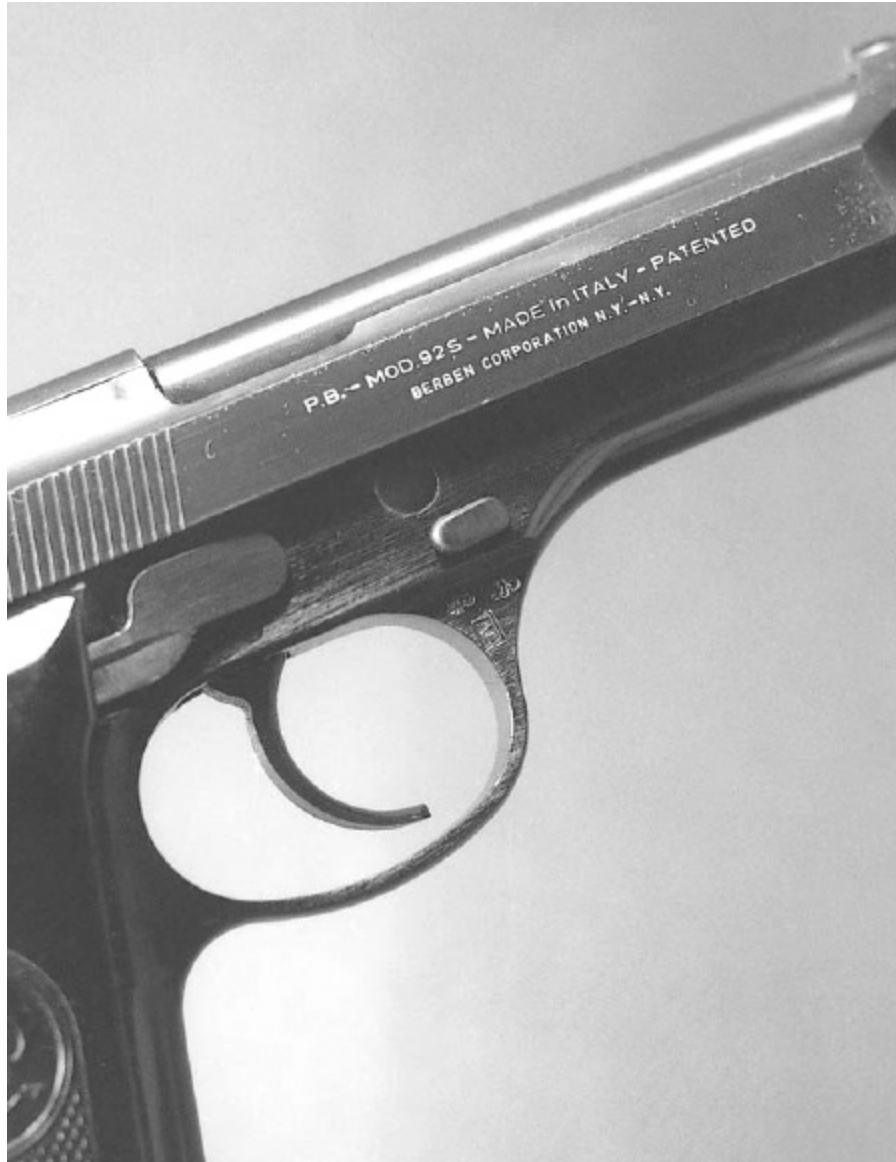
Barrel length: 5 inches

Weight: 34 ounces

Not long after the introduction of their new Model 92 pistol, Beretta offered an alternative safety system, and guns with the new safety systems have an “S” added to the model designation. The Model 92 has the safety at the upper rear of the frame, acting on the sear, while the Model 92S has a slide-mounted safety-lever, acting on the firing pin. Except for the safety, the two versions are mechanically the same and the instructions can be applied to either one.

The new U.S. military pistol, commercially called the Model 92F, has the magazine release button at the rear terminus of the trigger guard. The instructions for that part are the same as shown in the sequence on the Beretta 380-caliber Model 84. The Taurus PT92 and PT99 are essentially the same as the original Beretta Model 92. A separate series of instructions has been added to cover the frame-mounted sear-block on those guns.

Field Strip:



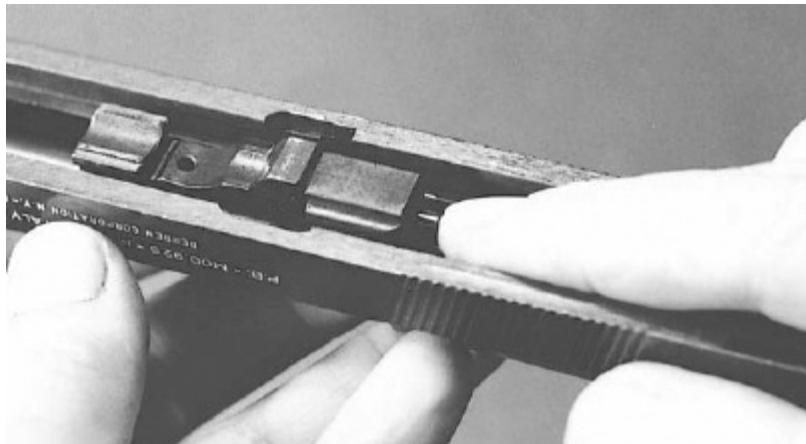
1. The takedown-lever release button is located on the right side of the frame, just above the front leg of the trigger guard. With the magazine removed, push the release button and turn the takedown-lever down.



2. Run the slide assembly forward off the frame.



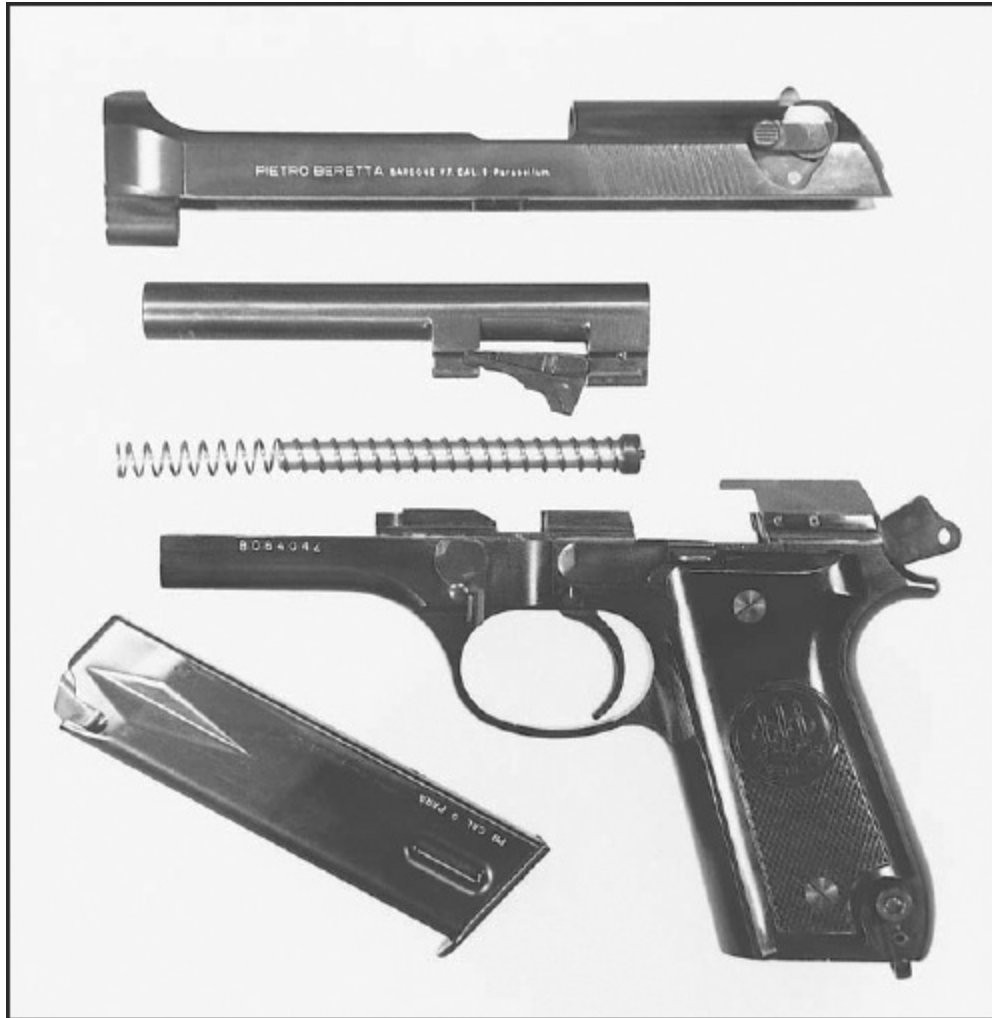
3. Lift the rear of the recoil spring guide from its step on the locking block and remove the spring and guide toward the rear.



4. Push the button at the rear of the barrel underlug to move the locking block from its recesses in the slide.

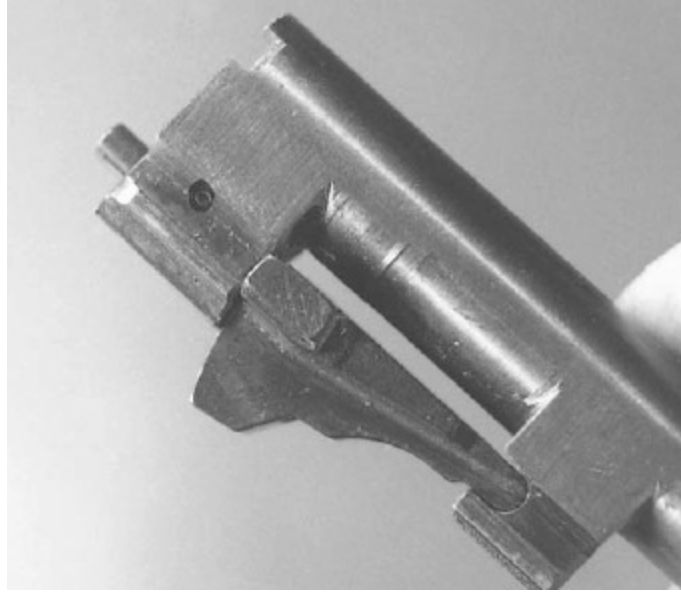


5. Move the barrel slightly forward to clear the extractor and remove the barrel from the slide, down and toward the rear. **Gun is now field-stripped.**

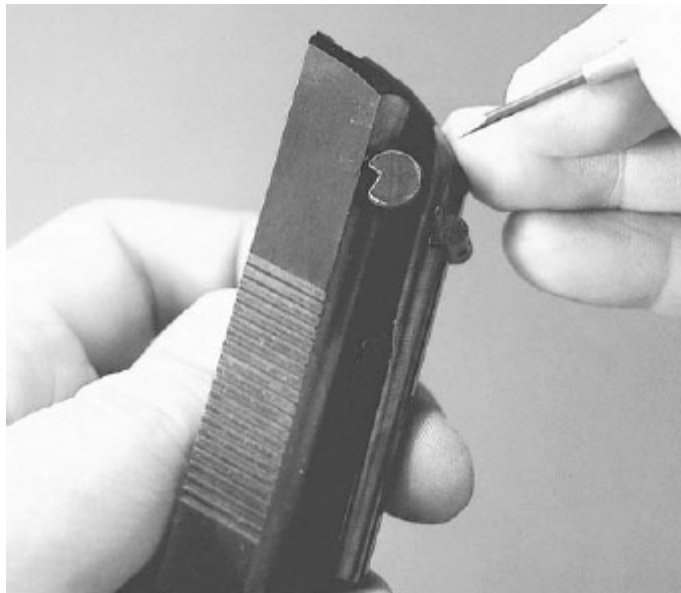


Beretta 92S field-stripped

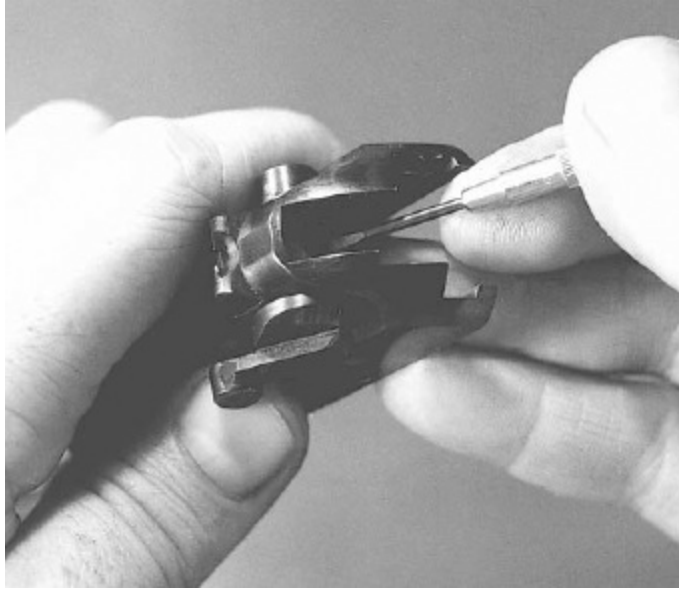
Detail Strip:



6. Drifting out the roll in the rear underlug of the barrel will release the locking block plunger for removal toward the rear. The locking block can then be moved out toward either side.



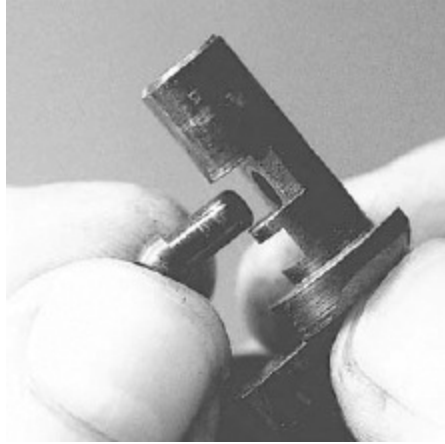
7. Use a small screwdriver to depress the small locking plunger at the right end of the safety-shaft. Move the safety-lever upward, slightly beyond its normal off-safe position, to trap the locking pin in the depressed position.



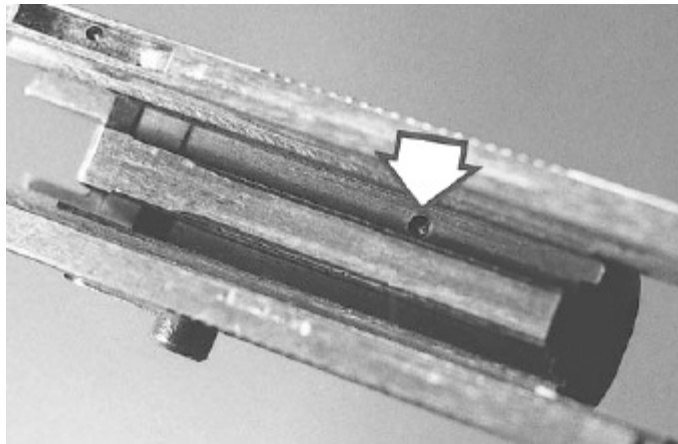
8. Use a small tool to depress the head of the firing pin impeller, and turn the safety-lever a little farther upward, then push the safety out toward the left. **CAUTION:** *The small lock pin on the right side will be released as the safety clears it.* Restrain the pin and its spring, and remove them upward from their recess in the slide.



9. Remove the safety toward the left side of the slide.



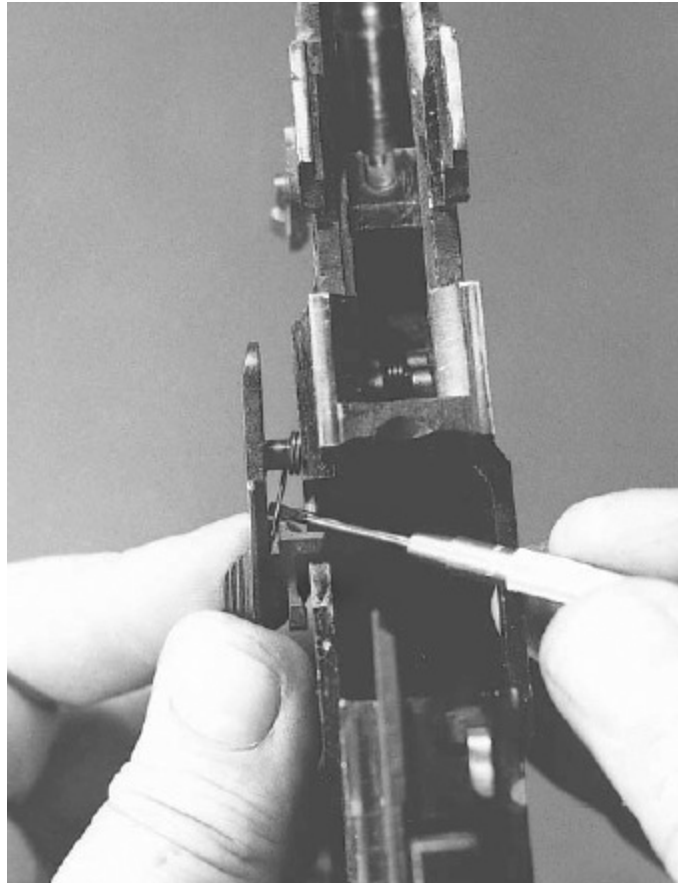
- 10.** With a small screwdriver, pry out the pin at the lower rear of the trigger and remove it toward the left. This will release the magazine safety and its spring to be removed to the rear, into the magazine well.



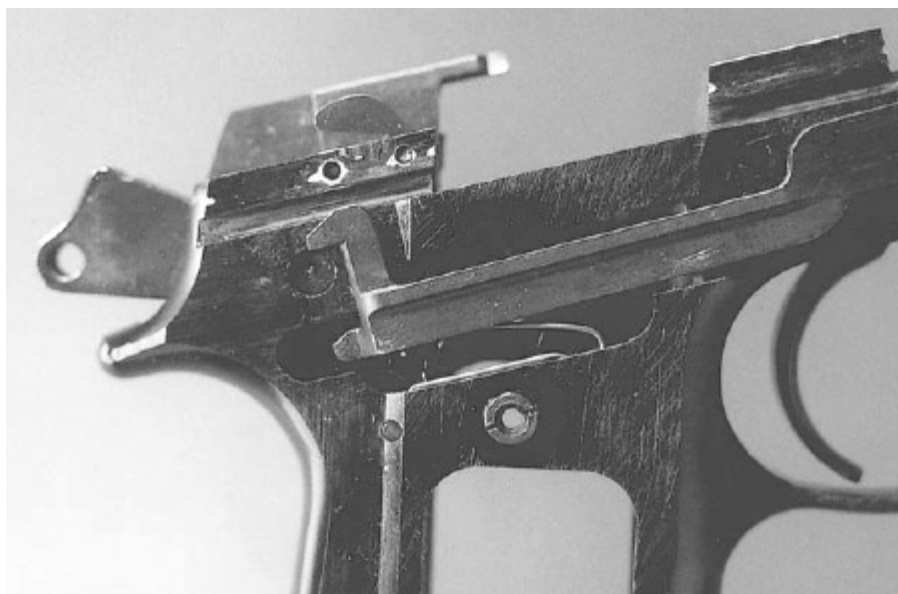
- 11.** If the hammer pivot has not been removed, pry the slide hold-open spring out and down, and detach it from the hold-open block toward the rear. The spring retains the block, and the block can now be slid straight up and out of the frame.



12. Lift the slide latch to clear the frame at the rear, and move it toward the left.



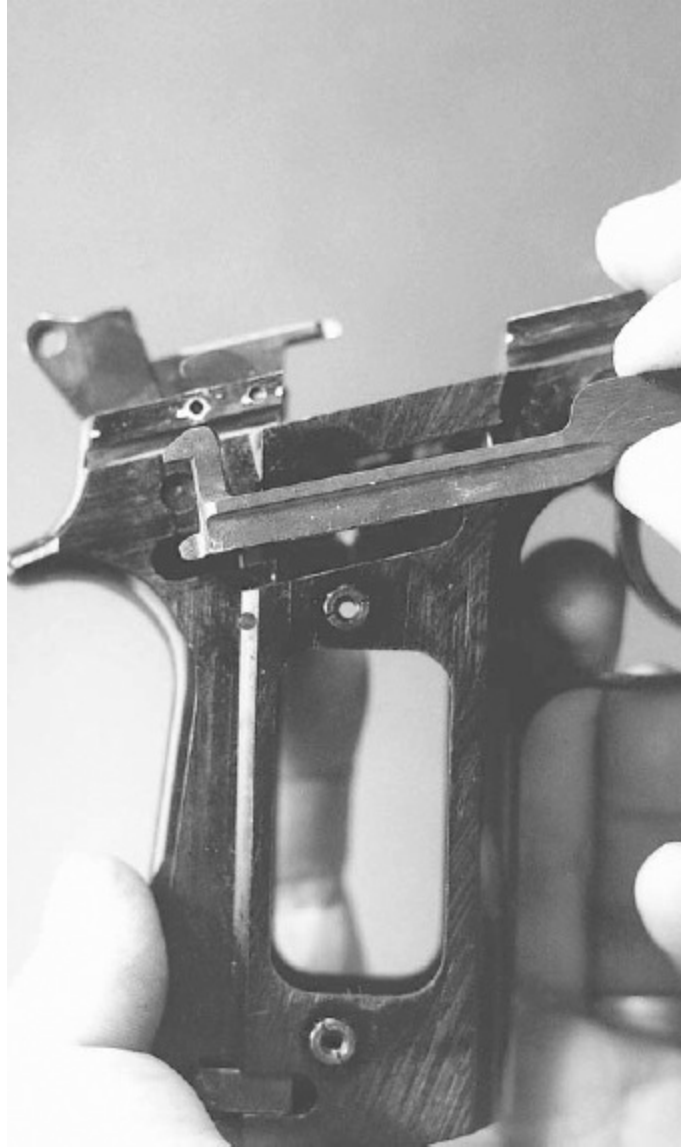
- 13.** After the slide latch is moved slightly outward, use a small tool to lift the rear arm of the latch spring from its recess in the latch and remove the latch toward the left side.



- 14.** The trigger bar and its spring are shown in assembled position on the right side of the frame.



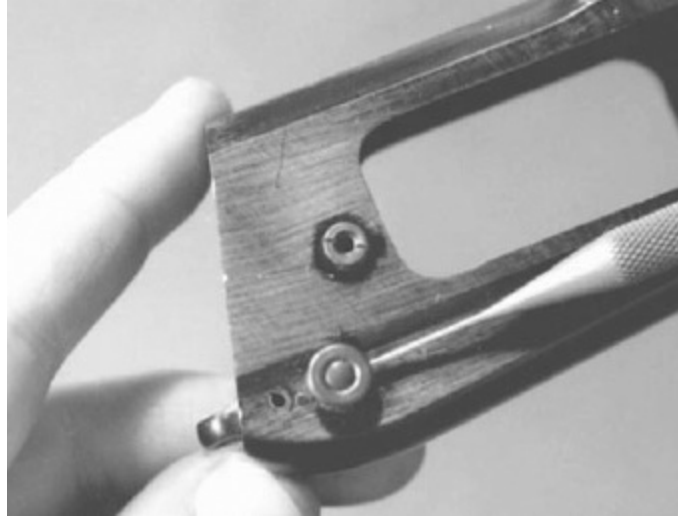
- 15.** Depress the upper arm of the spring from its groove in the underside of the bar, and move it out toward the right. Remove the spring from its recess upward.



16. Remove the trigger bar toward the right side.



- 17.** Removal of the slide latch and its spring will free the trigger pin to be taken out toward the left. The trigger and trigger spring are then removed up out of the frame.



- 18.** The magazine catch button is retained on the cross-shaft of the catch piece by a vertical pin. When the pin is drifted out, the button and spring are removed toward the left, and the catch piece toward the right.



19. Drifting out the roll pin at the lower rear of the grip frame will free the plug which forms the housing and base for the mainspring. Removing the housing downward will relieve the tension of the mainspring and allow its removal. Drifting out the large pin at the upper rear of the frame will free the hammer and hammer strut for removal from the top. Drifting out the smaller pin at the rear, just below the upper frame opening, will release the sear and sear spring for removal forward, into the magazine well. The two small pins at the top of the frame retain the hammer-drop lever and the ejector, and these parts are removed upward.

Detail Strip–Variations



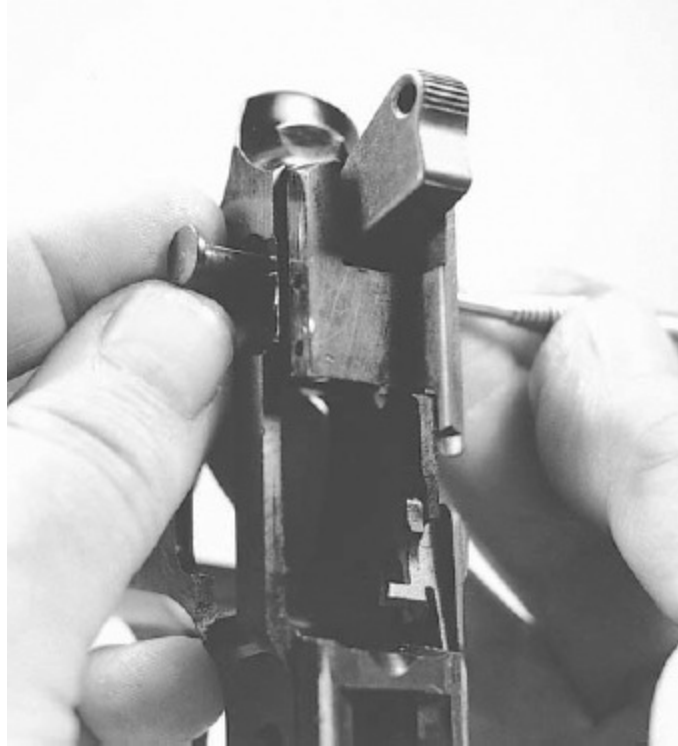
Beretta Model 92F



Original Beretta Model 92



- 1.** In the safety system of the original Model 92 (and the Taurus pistols), use a roll pin punch to drift out the small roll pin in the base of the safety-lever, downward.



2. Push out the safety pivot shaft toward the right. (**Note:** It is assumed that at this point the trigger bar and its spring have been removed.)



3. Turn the safety-lever up to the on-safe position, and remove the lever toward the left. **CAUTION:** *The safety positioning plunger and spring will be released upward as the lever is taken out, so control them.*



4. Remove the positioning plunger and spring upward. In reassembly, a tool must be inserted to depress the plunger as the safety-lever is put back into place.

Reassembly Tips:

When replacing the trigger bar, insert a tool from the top of the frame to lift the rear arm of the trigger spring, hooking it over the inward projection of the bar.

When replacing the slide latch, remember that the rear arm of its spring must be lifted into its recess on the inner projection of the latch.

When replacing the firing pin and extractor, use a slave pin to hold

these parts in place while driving in the retaining pin.

When replacing the safety in the slide, be sure that the flat of its back edge is aligned with the slant of the safety recess in the slide, and that the firing pin impeller is centered in the cross-piece of the safety. When everything is aligned, it can be pushed straight into the slide. When the right end of the safety reaches the lock plunger on the right side, the plunger must be depressed to pass under the end of the safety. When the safety is all the way in, it can be turned back down to normal position.

Beretta Model 418

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Beretta Model 418 also apply to the following guns:

Beretta Model 1920

Beretta Model 318



Data: Beretta Model 418

Origin: Italy

Manufacturer: Armi Beretta,
Gardone (Brescia)

Cartridge: 25 Auto

Magazine 8 rounds

capacity:

Overall length: 4.56 inches

Height: 3.43 inches

Barrel length: 2.36 inches

Weight: 14.87 ounces (steel frame)

11.72 ounces (alloy
frame)

During its 41 years of production, this neat little Beretta has had several model designations. Some have called the original version “Model 1919,” because of the patent date on the slide. The factory reference, though, is Model 1920. In that form, it was made until 1934. In 1935 and 1936, a change in the grip-frame shape made it the Model 318. Between 1937 and 1961, it was the Model 418. A few small mechanical differences will be noted in the takedown steps.

Field Strip:



1. With the magazine removed, turn the safety lever up to on-safe position and pull the slide back until it locks open. Push the

barrel rearward and lift it at the rear for removal. A very tight barrel may require a light tap with a non-marring tool to start it.



- 2.** Restrain the slide, turn the safety down to off-safe position, and ease the slide forward until it is even with the frame at the rear. Depress the grip safety and pull the trigger to drop the striker to fired position. The cocked indicator will disappear from its aperture at the rear.



- 3.** Move the slide assembly off the frame forward, and remove the recoil spring and its guide.



4. Remove the striker assembly from the slide. The striker spring is easily detached. Late versions will also have a small hollow sleeve/guide at the rear tip of the spring.



Beretta Model 418 field-stripped

Detail Strip:



- 5.** Drifting out this cross-pin in the slide will allow the extractor and its coil spring to be taken out upward.



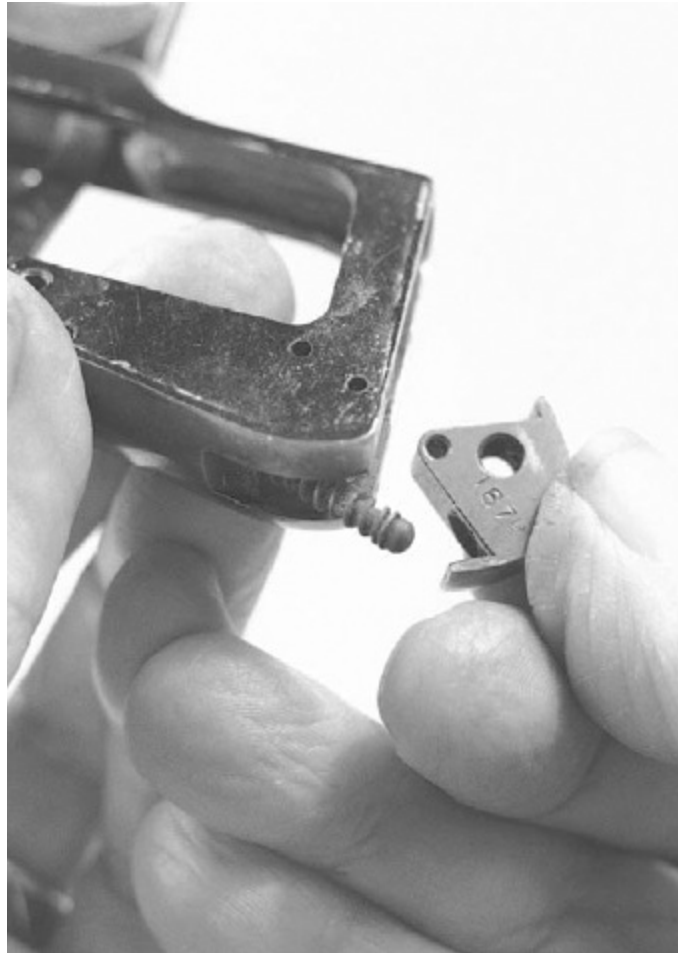
- 6.** The safety lever can be lifted out of the frame.



- 7.** Remove the grip screws, and take off the grips. Drift out the magazine catch limit pin.



- 8.** Drift out the magazine catch pivot pin.



9. Remove the magazine catch downward, and take out the catch and grip safety spring, and its plungers.



- 10.** Note that the spring plungers are not identical. The larger flat one at the top powers the grip safety, and the smaller rounded one powers the catch. Also note that in earlier pistols with the “hump” grip safety, each part has its own separate spring.



- 11.** Drift out the grip safety cross-pin.



- 12.** Remove the grip safety toward the rear. In pistols with the “Hump” type, the part is moved forward, into the magazine well, for removal.



13. Drift out the sear cross-pin. The other cross-pin, below, is the sear limit pin. It does not have to be removed in normal takedown.



- 14.** Tip the sear forward into the magazine well, and move it slightly to the right to clear its side-lug for removal. Note that the coil sear spring may or may not come out with the sear. It will be released, so take care that it isn't lost.



15. Remove the sear spring.



16. Drift out the trigger cross-pin.

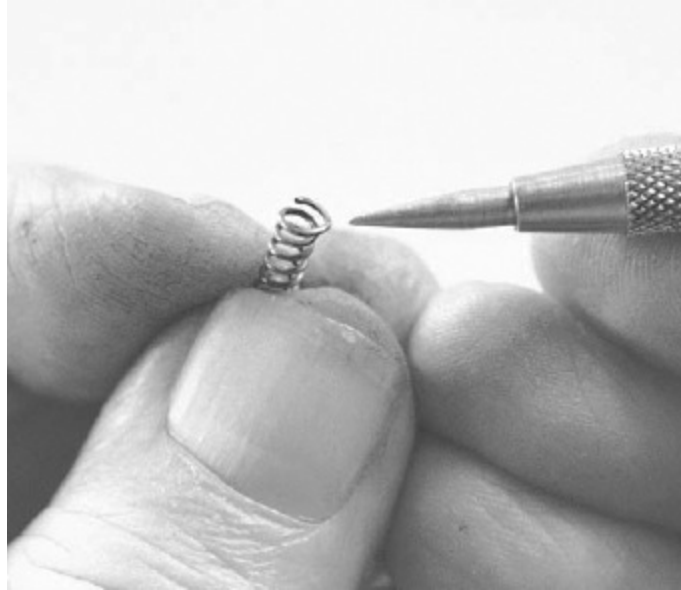


- 17.** Move the trigger assembly toward the rear, lifting the rear tip of the trigger bar very slightly, just enough to clear the side of the frame. Take out the trigger assembly.



18. The trigger bar and its spring and plunger can be removed from the trigger by drifting out the cross pin. **CAUTION:** *Control the plunger and spring.*

Reassembly Tips:



- 1.** Re-installing the sear will be easier if the lower end of the sear spring has a coil expanded, to seat and hold it in its recess in the frame.



- 2.** Be sure the sear cross-pin is well-centered, so that either end will not protrude into the slide track.

Beretta Model 950BS

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Beretta Model 950BS also apply to the following guns:

Beretta Model 950

Beretta Model 950B



Data: Beretta Model 950BS

Origin: Italy

Manufacturer: Armi Beretta S.p.A.,
Gardone (Brescia)

Cartridge: 22 Short and 25 ACP

Magazine capacity: 22—6 rounds;
25—8 rounds

Overall length: 4⁵/₈ inches

Height: 3³/₈ inches

Barrel length: 2³/₈ inches

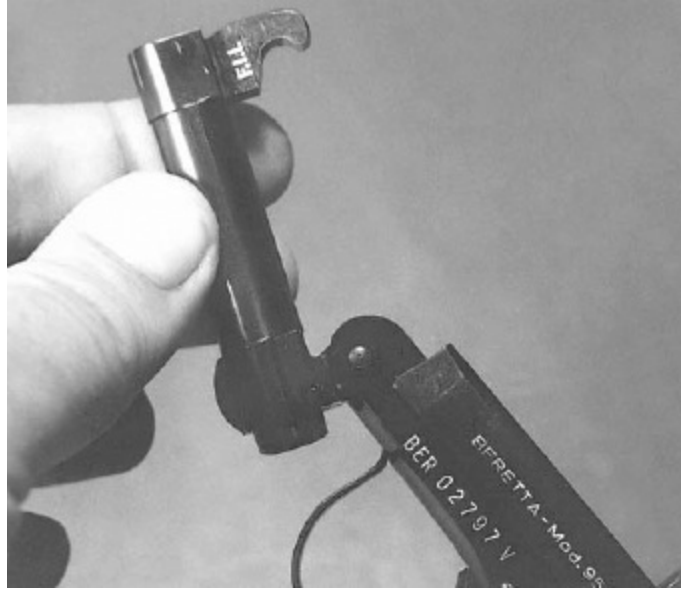
Weight: 10 ounces

Importation of the original “Minx” (22-caliber) and “Jetfire” (25 ACP) pistols (Model 950B) was stopped by the GCA '68, but in 1978 U.S. production was begun, and a manual safety was added to the design, adding an “S” to the model designation. The later production, made in Maryland, is equal to the quality of the original Italian-made guns. Except for the added safety, the mechanical details of the guns are identical.

Field Strip:



1. Move the barrel release forward, allowing the barrel to spring upward. Cock the hammer and remove the magazine.



2. Tip the barrel all the way over forward, beyond its normal opened position.



3. Lift the front of the slide, move it forward, and take it off the frame. **Gun is now field-stripped.**



Beretta 950BS field-stripped

Detail Strip:



4. After the grips are removed, all internal parts are held by cross-pins. To remove the safety, lower the hammer and pry the safety gently out to the left, being careful not to lose the small safety plunger and spring which will be released. The hammer spring and strut are removed by prying the spring base out of its recess in the frame, and by moving the spring forward into the magazine well. The hammer pin must be pushed out from right to left, its left end being the post for the safety spring. Before removing pins, note the relationship of all parts to aid in reassembly.



5. Removal of the large pin at the lower rear of the trigger (arrow) will release the recoil spring which is taken out downward and toward the rear. This will also release the barrel latch lever to be removed from the left side. When taking out the trigger and trigger bar toward the rear, spring the bar slightly outward to clear the frame on the left side. The front arm of the sear spring is easily lifted from the right ear of the sear when the hammer is on the safety step. The spring can then be lifted from its recess in the frame.



6. Driving out the cross-pin at the front of the frame will release the barrel and the trigger guard, which also serves as the barrel spring. The rear of the guard fits into a recess in the frame, and is held in place by spring tension.

The firing pin is retained by a single vertical roll pin in the slide, and this should be driven out with a special roll pin drift punch.



7. The magazine release button simply unscrews from the magazine catch on the opposite side of the frame, but removal may be difficult. A wide screwdriver with a very thin blade is necessary, and one may have to be ground to fit. Also, the threaded tip of the button will usually be hollowed and spread on the outside of the catch piece, and turning it out may require more than ordinary force.

Reassembly Tips:



1. When replacing the slide on the frame, set it on top of the frame in the position shown, being sure that the exposed ends of the recoil spring are in their notches on the underside of the slide, and the rear sidewings of the slide are positioned to enter the slide tracks on the frame. Then push the slide down and toward the rear, snapping it into place, and flip the barrel back over to the normal firing position.



When replacing the safety-lever on the frame, remember that the hammer must be down and the safety in the off-safe position for reinsertion. Use a small screwdriver to depress the safety plunger, and take care that it doesn't slip off, as the plunger is tiny and easily lost if it flies out.

When replacing the recoil spring, note that its internal loop must be positioned in *front* of the cross-shaft of the barrel release.

Remember that the hammer should be set on the safety step for easy reinsertion of the sear spring.

Beretta Model 1934

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Beretta Model 1934 also apply to the following guns:

Beretta Model 1931

Beretta Cougar

Beretta Model 1932

Taurus Puma

Beretta Model 1935



Data: Beretta Model 1934

Origin: Italy

Manufacturer: Pietro Beretta,
Gardone (Brescia)

Cartridge: 7.65mm (32 ACP)
9mm Corto (380 ACP)

Magazine capacity: 7 rounds

Overall length: $5\frac{7}{8}$ inches

Height: $4\frac{7}{8}$ inches

Barrel length: $3\frac{1}{2}$ inches

Weight: 23 ounces

The Beretta Model 1934 was the standard sidearm of the Italian Army from the year of its introduction until 1951, when it was replaced by the excellent Model 951. In 1935, a 7.65mm (32 ACP) version was also produced and used principally by the Italian Air Force. The two guns are identical except for caliber. The Model 1934 was also sold commercially in the U.S. after World War II as the Cougar and Puma. The rare Model 1931 and Model 1932 are seldom seen outside of collections. It is one of the most rugged and reliable pistols ever made. Mechanically, all models are the same.

Field Strip:



1. With the magazine removed, turn the safety to the rear on-safe position, and lock the slide open.



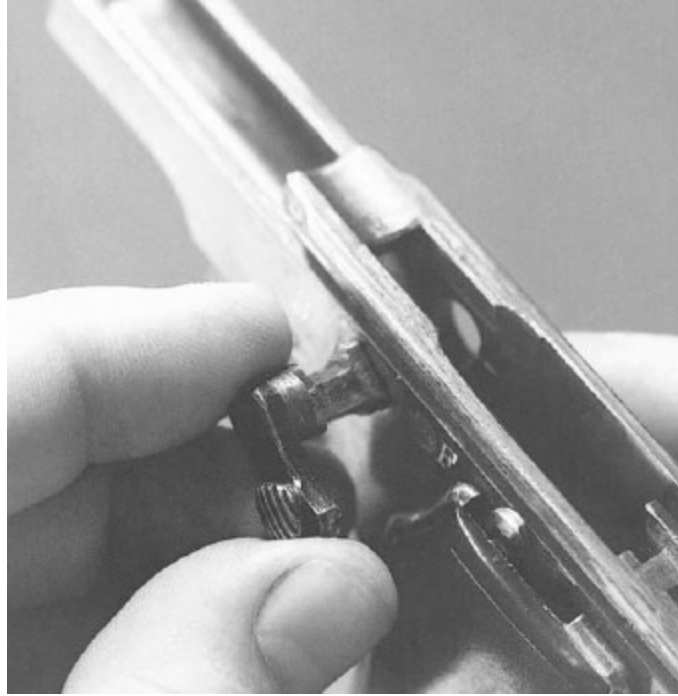
2. Push the barrel straight to the rear. **Note:** Some barrels may be tight in the mounting slots, and will require a light tap with a plastic hammer to start them back.



3. Lift the barrel at the rear, and remove it from the top of the slide.



4. Holding the slide against recoil spring tension, release the safety and run the slide forward off the frame. Remove the recoil spring and guide.



5. Remove the safety-lever from the left side of the frame. **Gun is now field-stripped.**



Beretta 1934 field-stripped

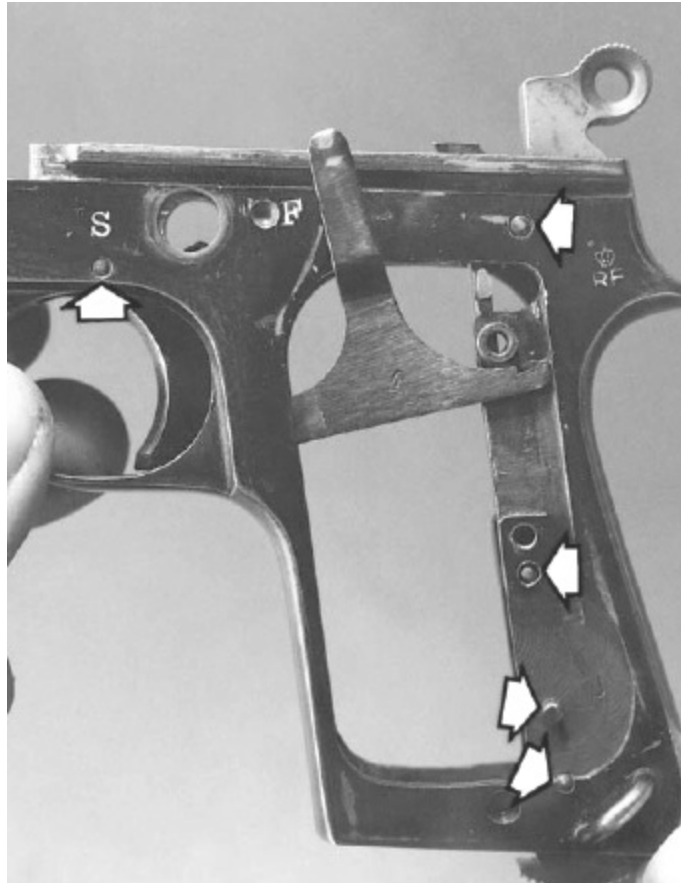
Detail Strip:



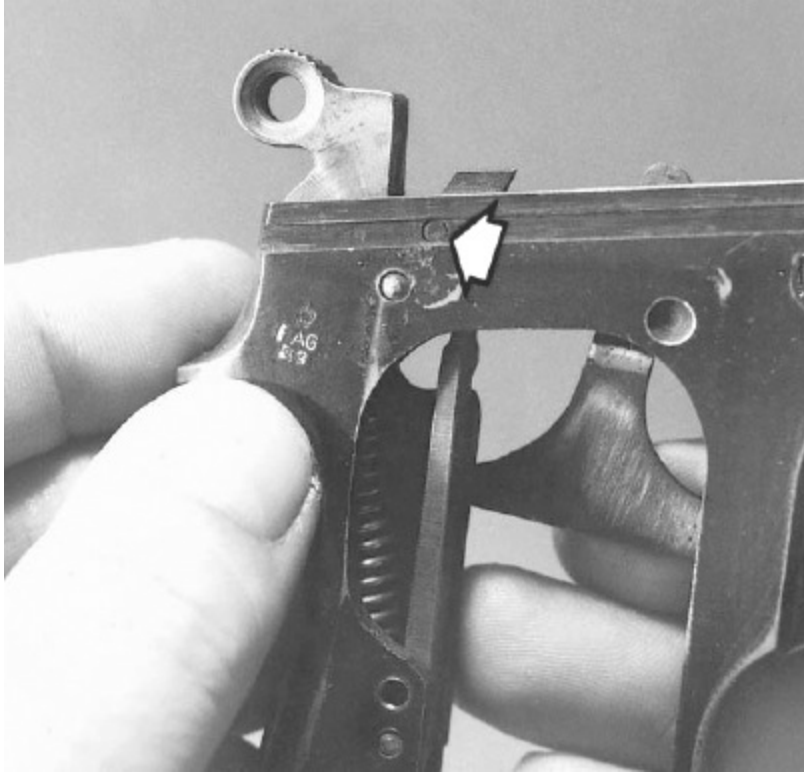
6. A single cross-pin in the slide retains both the firing pin and the extractor. Drifting out this pin will release both parts, and their springs.



7. After the grips are removed, take out the hexagonal-head screw on the left side and lift the flat sear lever from the frame.



8. Cross-pins retain the trigger, hammer, and sear (arrows, left to right). The trigger is removed toward the rear, and its disconnecter bar must be sprung slightly outward to clear the frame. After taking out the hammer and sear pins, the hammer is removed from the top, and the sear toward the magazine well. The hammer spring and follower are a captive unit on the sear. Knocking out the two pins at the lower rear of the grip frame will release magazine catch and spring.



9. The cross-pin at the top of the frame, visible in the slide track, retains the ejector.

Reassembly Tips:

Install sear and hammer spring unit before the hammer, and push the hammer into place for insertion of the pivot pin.

If the barrel is tight, trip the slide to drive it into place, but do not rotate the safety beyond the on-safe position while doing this.

Install the firing pin and extractor with the slide and barrel mounted on the gun. Use the lowered hammer to hold the firing pin in place while inserting the extractor and cross-pin. Be sure the firing pin is oriented with its retaining notch at the top.

Beretta Neos

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Beretta Neos also apply to the following gun:

Beretta Neos Inox



Data: Beretta Neos

Origin: United States

Manufacturer: Beretta USA,
Accokeek, Maryland

Cartridge: .22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 8.8 inches

Height: 5.2 inches

Barrel length: 4.5 inches

Weight: 31.7 ounces

The lines of the Neos were designed by the Giugiaro firm and, along with its cousin the CX4 Storm carbine, are some of the most radical newer entries into the Beretta product line. This .22 L.R. handgun has a sweeping angle to its pistol grip, and having a small cross-sectioned grip makes it a well-pointing gun for people with small hands. Several barrel lengths are available, all of which include a scope mounting rail which runs the entire length of the handgun. Red Dot optics and pistol scopes are commonly mounted here. The grip itself is interchangeable and Beretta offers other colors such as yellow and blue in addition to the standard black, as well as a carbine conversion kit to allow the handgun to be converted into a rifle. This handgun was first introduced in 2002 and is also available with a silver slide and barrel.

Field Strip:



1. With the magazine removed, depress the “x” button on the right side of the frame. Turn the little disassembly wheel to unscrew the barrel assembly. When looking down at the gun from directly above, the wheel would turn clockwise, or toward the magazine button. Remove the barrel assembly.

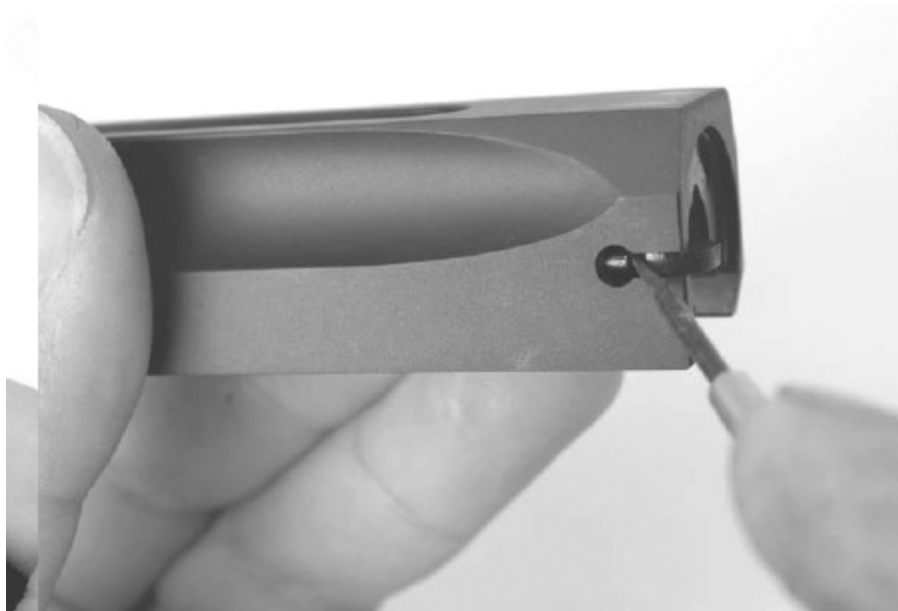


2. Release the slide stop and pull the slide and slide spring forward off the frame.



Beretta Neos field stripped

Detail Strip:



3. To remove the extractor, pull the extractor plunger to the rear and roll the extractor into the ejection port to remove. The plunger and spring will fall out of the hole.



4. Remove the grip screw.



5. Gently push forward and down the tab at the front of the trigger guard to release the pistol grip from the receiver. As you do so, the barrel nut will fall out.



6. As you pull the receiver from the frame, remove and keep control of the slide stop and its spring.



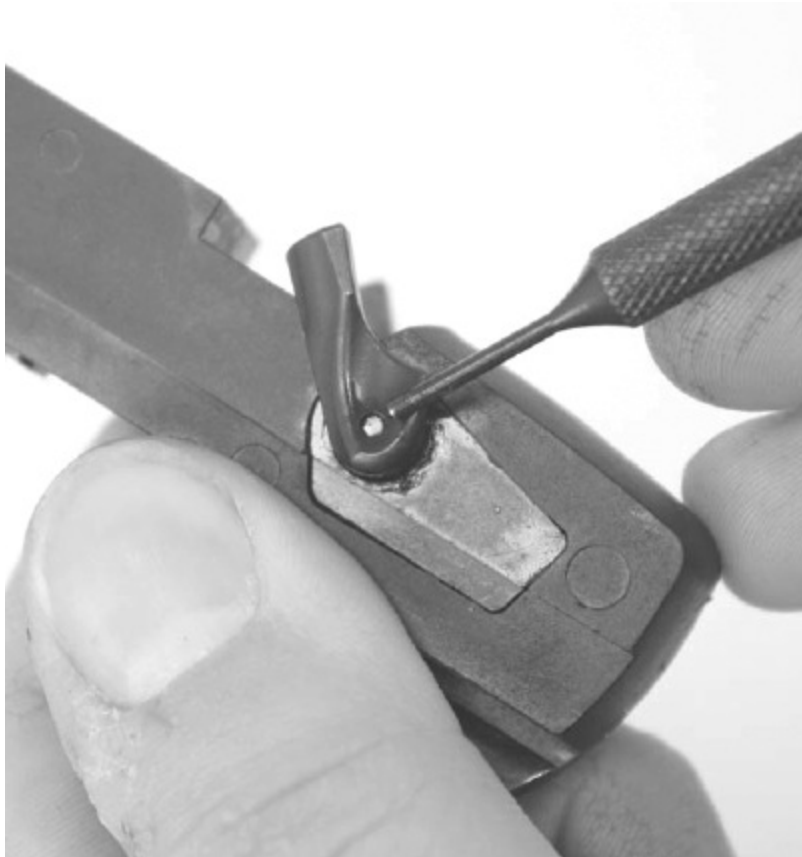
- 7.** The barrel nut lock assembly can now be removed by unscrewing the button on the right side from the nut on the left side. Be sure to catch the spring.



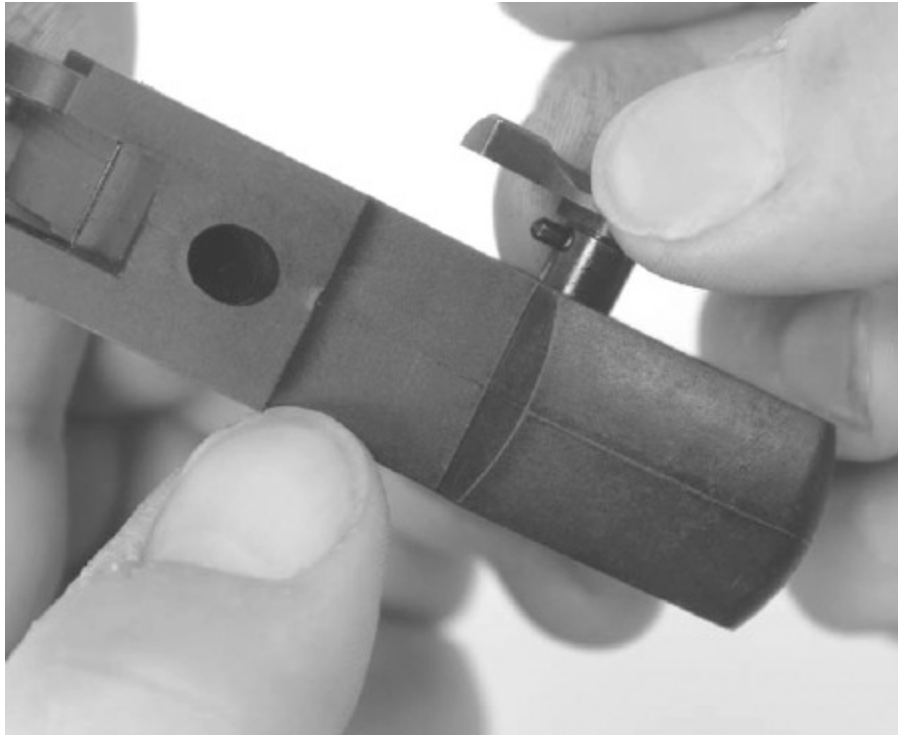
- 8.** While restraining the firing pin, pull the trigger to release the firing pin and pull the pin and firing pin spring from the receiver.



- 9.** Remove the firing pin guide screw. The firing pin guide will come off and the trigger bar will be released. This will also free the safety insert.



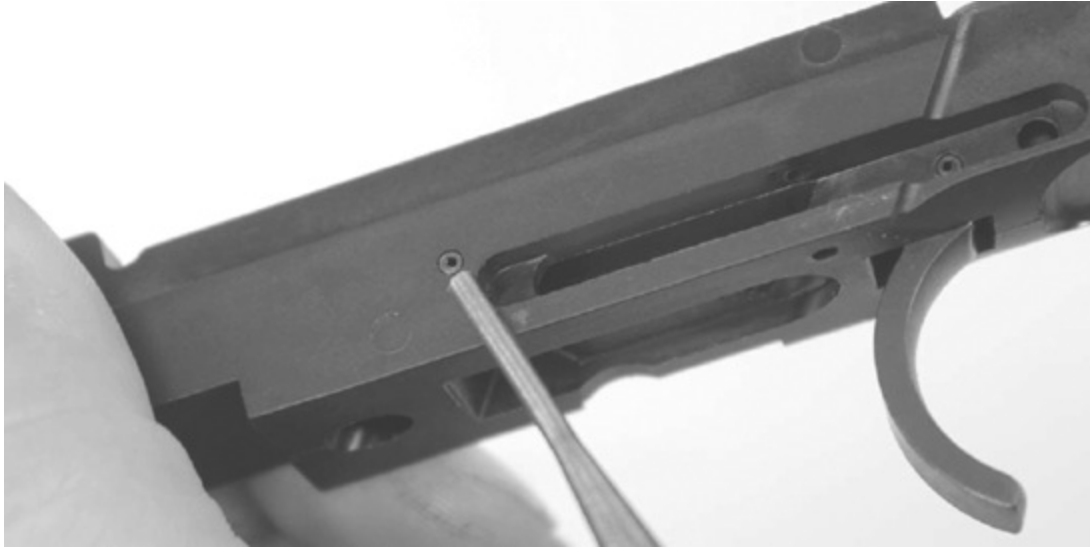
- 10.** Remove the right safety lever by depressing the small pin in the lever and pushing the lever off the safety body.



11. Push the safety body out to the left of the insert, being careful to catch the safety detent and spring.



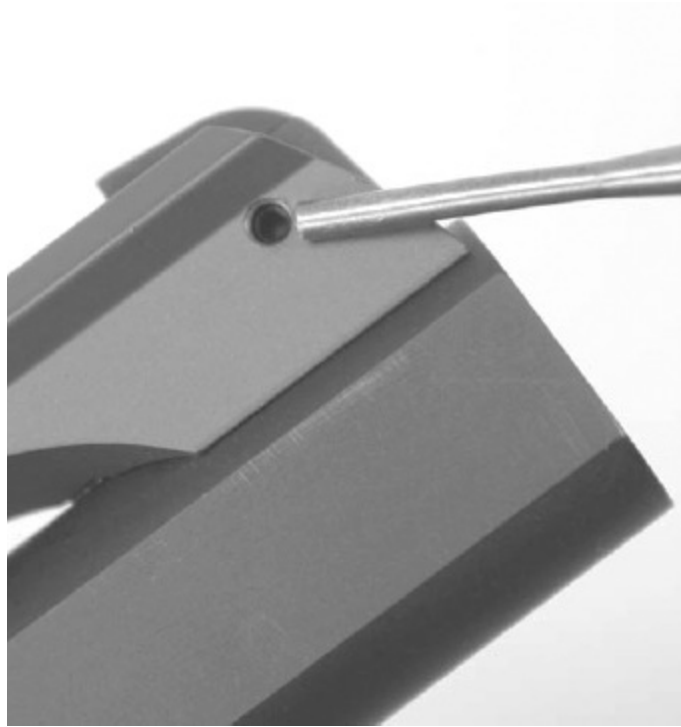
12. Push out this roll pin to remove the magazine catch and spring.



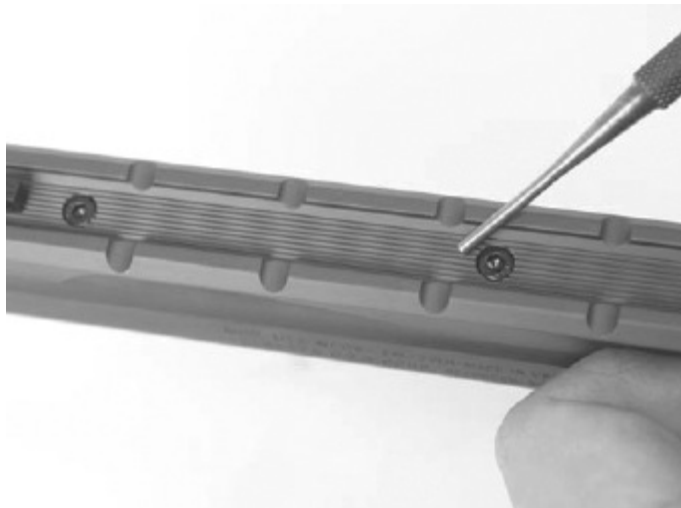
13. Push out this roll pin to remove the ejector.



14. Push out this roll pin to remove the trigger, trigger bar, and spring. The trigger bar attaches to the trigger by means of a post projecting from the bar.



15. The front sight can be changed by removing this screw.



16. The top rail is attached by means of two screws shown here and several pins. There is no need to remove it except for major repair.



17. This pin and the elevation adjustment screw retain the rear sight.

Bernardelli “Baby”



Data: Bernardelli “Baby”

Origin: Italy

Manufacturer: Vincenzo Bernardelli,
Gardone V. T. (Brescia)

Cartridges: 25 Auto, 22 Short

Magazine capacity: 6 & 8 rounds (25 Auto)

Overall length: 4.12 inches

Height: 2.56 inches

Barrel length: 2.12 inches

Weight: 9.2 ounces

Introduced in 1945, the little Bernardelli has that marvelous old-style European construction. Prior to the silly U.S. importation restrictions of 1968, it was sold here extensively. An optional extended magazine held eight rounds. From 1987 to 1993, AMAC (Iver Johnson) made a nice little copy of the pistol, mostly in 25 Auto. There are a few small mechanical differences, but some of the instructions will apply.

Field Strip:



1. With the striker in fired position and the magazine removed, depress the takedown button, located on the left side of the frame at upper rear. When the striker spring base moves out, pull it rearward until it stops.



- 2.** Move the slide slightly rearward, so the extractor and firing pin point will clear the rear of the barrel, and lift the slide upward at the rear. Move the slide forward off the frame.



- 3.** Remove the striker assembly toward the rear. The spring, cocked indicator, and indicator spring are easily separated if necessary for repair. In some late pistols, and the AMAC copy, the indicator is a full-length guide, without a separate spring.



4. Remove the recoil spring and its guide.

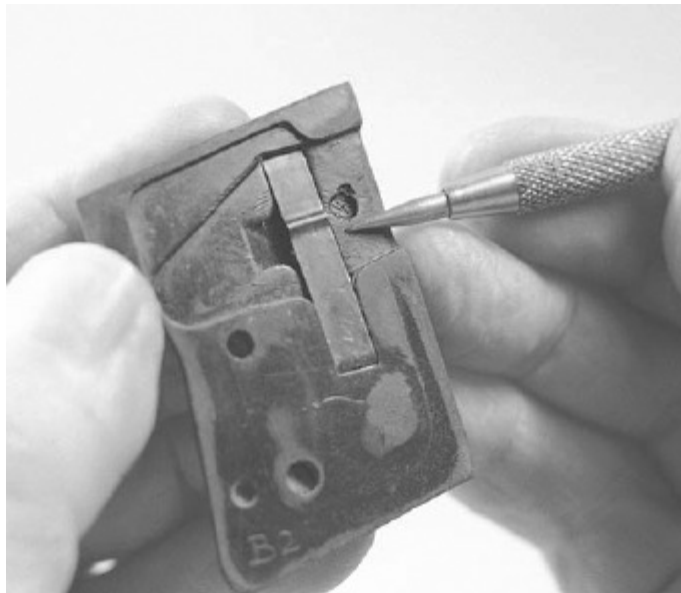


Bernardelli "Baby" field-stripped

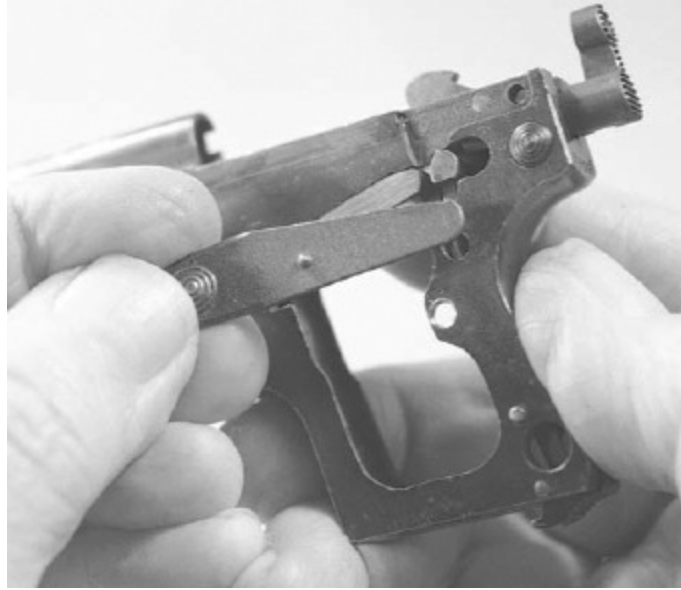
Detail Strip:



- 5.** Turn the disconnecter upward, and take it off toward the left. Note that in handling of the frame, this part often falls off and is lost.



- 6.** With a screwdriver of the proper size, remove the screw and take off the left grip. In a recess inside the panel is the safety detent spring. If necessary for repair, it can be gently pried from its recess. Remove the other screw, and take off the right grip.



7. Lift off the manual safety lever.



8. Drift out the sear pivot pin.



9. Remove the sear upward.



10. Depress the takedown button, and remove the striker spring base toward the rear.



- 11.** Remove the sear spring and plunger from the lower extension of the striker spring base.



- 12.** Remove the takedown button toward the left. Its coil spring is easily detachable.



13. Drift out the magazine catch limit or stop pin. The magazine catch will pivot over into the magazine well.



14. Drift out the magazine catch pivot pin.



- 15.** Take out the magazine catch, and remove the combination magazine catch and drop-safety spring.



- 16.** Depress the trigger slightly, and lift the front of the trigger bar out of its engagement with the trigger. Move the bar forward for removal.



17. Tip the drop-safety forward into the magazine well and take it out.



18. Move the trigger forward and tip its lower end toward the front for removal.



- 19.** Drifting out this pin will release the magazine safety and its torsion spring for removal. In the slide, drifting out the vertical pivot upward will release the extractor and its coil spring. Except for repair, both parts can be left in place.



- 20.** For refinishing or replacement, the barrel can be driven out of its T-mount in the frame.

Reassembly Tips:



1. When installing the magazine catch and the drop-safety, note that the top lug of the safety must be fully to the rear in its frame recess before the pivot pin for the two parts is re-inserted. After this is done, the combination spring can be put in, the catch moved to the rear, and the limit pin can be installed.



- 2.** Before the sear pin is re-inserted, the striker spring base must be put in to the depth shown, as it is also retained by the pin.

Bersa Model 383

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Bersa Model 383 also apply to the following guns:

Bersa Model 223

Bersa Model 226

Bersa Model 224

Bersa Model 323

Bersa Model 225



Data: Bersa Model 383

Origin: Argentina

Manufacturer: Bersa, Ramos Mejia

Cartridge: 380 ACP

Magazine capacity: 7 rounds

Overall length: 6.61 inches

Height: 4.72 inches

Barrel length: 3¹/₂ inches

Weight: 24.34 ounces

The earlier single-action Bersa pistols were well made and reliable, but they lacked cosmetic appeal. The current double-action models go far in the other direction—they are beautiful guns. There is a 32 ACP version, and there are four 22 Long Rifle pistols, in varying barrel lengths. The 22-caliber counterpart of the gun shown here is the Model 223. The instructions apply to all six models. On the longer-barreled 22-caliber pistols, the muzzle nut and front sight must be taken off during disassembly. Otherwise, they are the same.

Field Strip:



1. With the magazine removed and the hammer cocked, push the

lever on the right side of the frame downward and forward until it stops. On some Bersa pistols, it will stay in that position. If not, hold it there.



2. Draw the slide back all the way and lift it up at the rear. The slide can then be moved forward off the barrel and frame, and the recoil spring can be removed from the barrel. **Gun is now field-stripped.**



Bersa Model 383 field-stripped

Detail Strip:



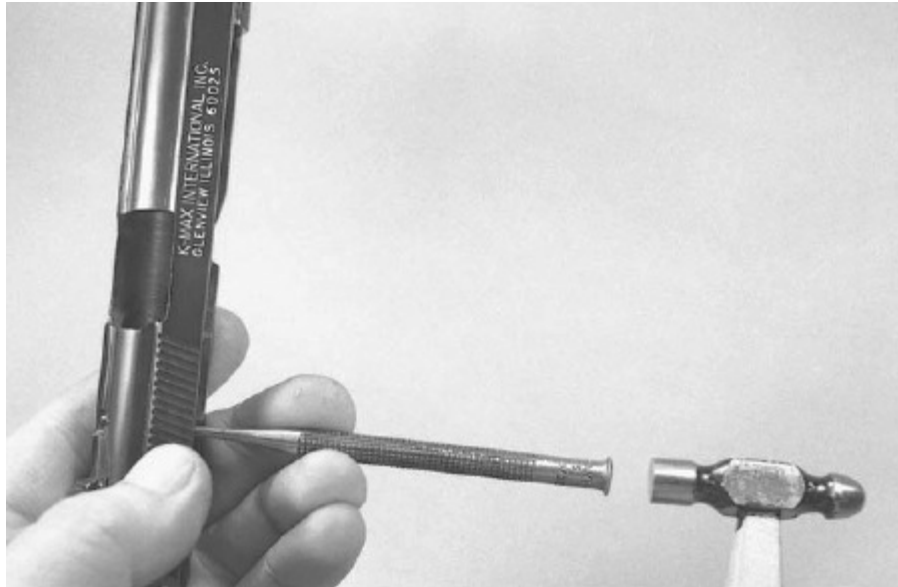
3. With the manual safety in mid-position, use a small tool to push it out toward the left. During removal, keep the lever in the same mid-orientation, to prevent the detent plunger from entering the various recesses in the cross-piece.



4. The firing pin and its spring can now be removed toward the rear. If necessary, the safety detent plunger and its spring can be nudged out of the recess in the slide, downward and toward the rear.



5. With a non-marring tool, the rear sight can be drifted out of its dovetail toward the right. The sight leaf can be taken out of the base by backing out the adjustment screw. Take care that the small coil spring behind the bottom of the leaf isn't lost.



6. The extractor is pivoted and retained by a vertical pin on the right side of the slide. The pin is driven out upward. The extractor and its spring can then be taken off toward the right.



- 7.** The grip panels may be tightly fitted—use care in removing them. The grip stabilizing pin is a loose fit in the frame, but it has a serrated center section to keep it from falling out when the grips are off. The pin can be driven out, if necessary. Disconnect the trigger bar spring from its notch in the underside of the trigger bar at the rear, and move it inward.



- 8.** Pull the trigger a very small distance, and remove the trigger bar toward the right.



9. The trigger bar spring is staked in place. Unless removal is necessary for repair, it is best left in place.



10. Use a tool to push the upper tip of the magazine safety spring out of engagement with its notch in the frame, and tilt the spring outward to remove it. **CAUTION:** *The spring is under tension, so be sure to control it.*



- 11.** Move the magazine safety bar downward until it clears its cut in the frame, and lift it off the frame.



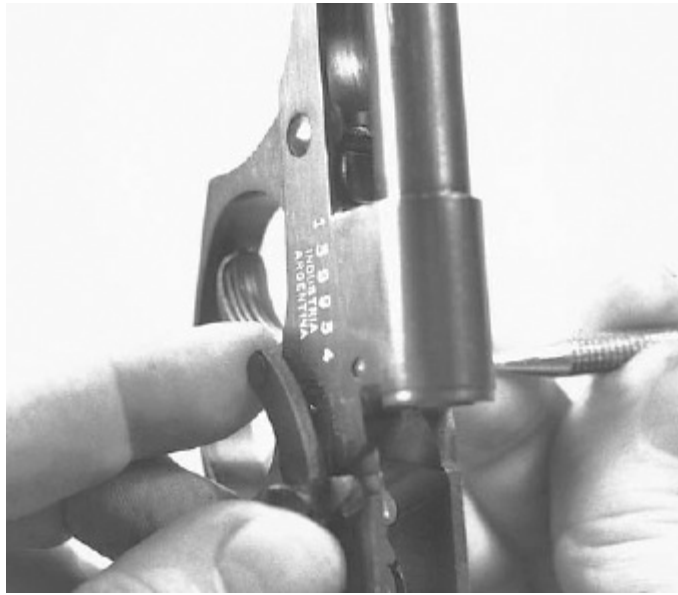
- 12.** To remove the magazine catch, depress it fully, and turn the screw-head of the catch retainer clockwise until it stops.



- 13.** The magazine catch assembly is removed toward the right. Turning the catch retainer leftward will release the retainer and spring for removal. **CAUTION:** *The spring is under tension.*



- 14.** To remove the takedown-latch system, insert a tool between the latch stop piece and the barrel and depress the stop piece. This will allow the latch lever to be taken off toward the right. The stop piece and its spring cannot be taken out until the barrel is removed.



- 15.** Remove the trigger upward.



- 16.** Remove the slide latch toward the left.



- 17.** Removal of the slide-latch will release the trigger spring to fall out the magazine well. Take care that the spring isn't overlooked and lost.



- 18.** Turn the trigger inside the guard to the position shown, and remove it toward either side.



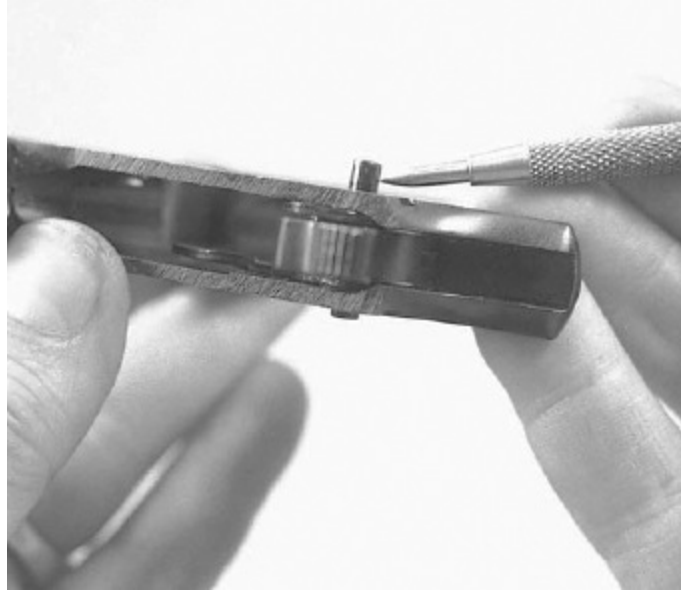
- 19.** The slide-latch spring is staked in place, and it is best to leave it installed unless replacement is necessary.



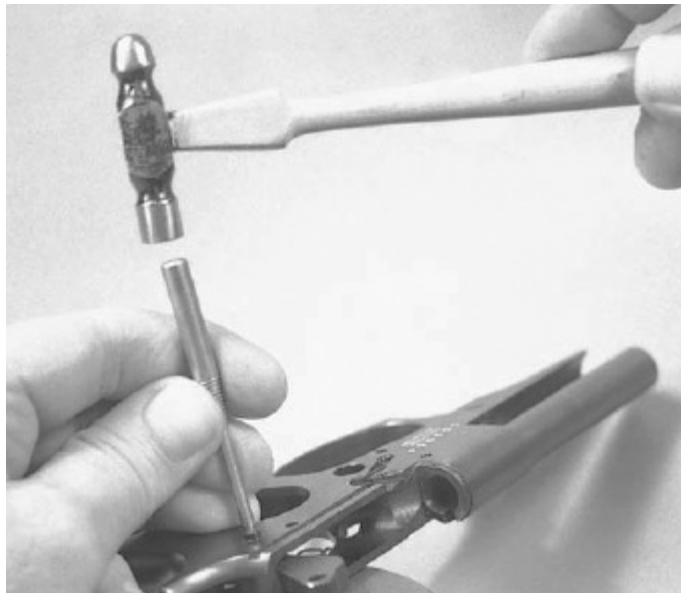
20. Drift out the ejector stabilizer pin toward the right.



21. Note that when this pin is removed, it will release a cylindrical bushing or space that fits between the ejector and the sear trip lever. Take care that this small part isn't lost.



- 22.** Before drifting out the hammer pivot, note that it protrudes from the frame more on the right side than on the left, and must be re-installed in that mode.



- 23.** Drifting out the hammer pivot, it is best to support the frame on a machinist's block, as shown, or on a slightly opened bench vise.



- 24.** Removal of the hammer pivot will release the hammer, ejector, and sear trip lever. All these can be taken out upward.



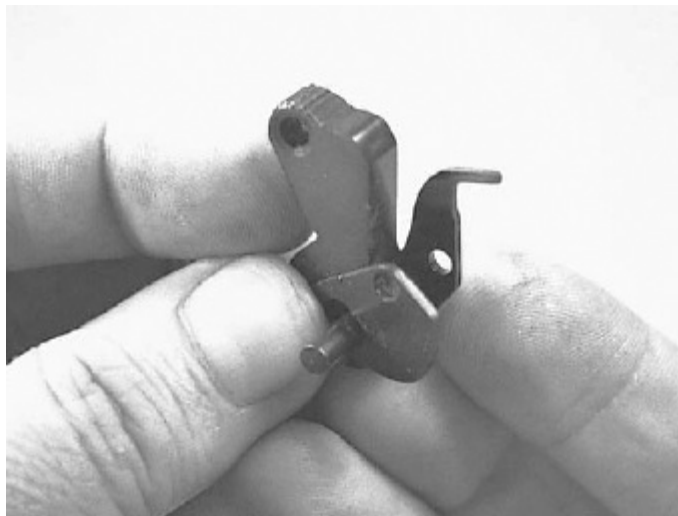
- 25.** The sear and hammer spring assembly can now be removed forward into the magazine well and taken out toward either side.



26. Depressing the hammer spring guide slightly and turning it sideways will allow the guide and spring to be separated from the sear. **CAUTION:** *The spring is under tension, so control it.*

Reassembly Tips:

When putting the sear and hammer spring assembly back together, grip the top of the spring guide (inverted) in a bench vise, and push the sear down on it. Or, even better, grip the top of the guide with smooth-jawed Vise-Grip pliers, rest the bottom of the sear on top of a slightly-opened vise, and push down and turn.



1. The hammer, ejector, and sear trip lever are shown here assembled on the hammer pivot, in the positions they occupy in the frame.

Start the hammer pivot from the left, and install the ejector, then the hammer, then the sear trip, pushing the pin through in stages. Remember that the pin must protrude more on the right side of the frame. Use the grip panels as gauges for this.

When replacing the ejector stabilizer pin, use the same by-stages insertion. Remember to replace the spacer cylinder on the pin between the ejector and sear trip.



2. When installing the trigger and trigger spring, be sure the longer arm of the spring is toward the front of the trigger, as shown. A slave pin will be necessary to hold the spring in the trigger during reassembly.

As the slide-latch is moved into place, be sure the tip of the slide-latch goes on top of the inner lug of the latch.

When replacing the trigger bar, be sure the tip of its spring is hooked into the notch in the lower rear end of the bar. Depress the magazine safety upward as the trigger bar is installed, to insure that the upper

hook of the safety engages with its shelf on the inside of the trigger bar.

Browning Buck Mark

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Browning Buck

Mark also apply to the following guns:

Browning Buck Mark Plus

Browning Nomad

Browning Challenger III

Browning Buck Mark Varmint

Browning Challenger

Browning Medalist

Browning Buck Mark Silhouette

Browning Challenger II



Data: Browning Buck Mark

Origin: United States

Manufacturer: Browning, Morgan, Utah

Cartridge: 22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 9¹/₂ inches

Height: 5¹/₄ inches

Barrel length: 5¹/₂ inches

Weight: 32 ounces

Introduced in 1985, the Buck Mark replaced the earlier Belgian-made Browning 22 pistols, the Nomad, Challenger, and Medalist. Technically, there were few changes, and the instructions can generally be used for these as well. The Buck Mark is also offered in Silhouette, Varmint, and Buck Mark Plus versions. On the Varmint and Silhouette, initial takedown requires removal of the top rear screw and the barrel retaining screw. Otherwise, there are no differences that affect takedown and reassembly.

Field Strip:



1. Field-stripping of the Buck Mark requires removal of external

screws, so be sure the screwdriver blades used fit the slots perfectly, to avoid any marring. Remove the large screws at the front and rear of the sight base. Inside the base, the screws are secured by lock washers, and both may be very tight. Take care to prevent slipping of the screwdriver.



- 2.** After removal of the screws, lift off the sight base. Take care that the two lock washers are not lost.



3. Retract the slide slightly and grasp the recoil spring guide at the front, lifting it upward. The spring is a captive unit on the rod. Removal of the C-clip at the rear will allow the spring and rod to be separated. **CAUTION:** *The spring is under tension, so control it.*



4. Lift the slide off the top of the frame.



5. The firing pin is retained in the slide by a transverse roll pin. Use a roll pin punch to drift it out, and remove the firing pin and its

spring upward.



- 6.** Use a very small screwdriver to depress the extractor plunger rearward, and tip the extractor out toward the front for removal.
CAUTION: *Control the compressed plunger and spring, and ease them out toward the front for removal.*



- 7.** The barrel is retained by a large screw at the front of the frame.



8. Backing out the screw will allow the barrel to be taken off upward. **Gun is now field-stripped.**



Browning Buck Mark field-stripped

Detail Strip:



9. The slide buffer will probably remain on the frame post when the slide is removed. It can be gently pried away from the post with a sharp tool.



- 10.** The factory instruction booklet contains a caution about removing the grips, noting that they contain and position certain parts. For the non-gunsmith, this is good advice. In complete takedown, the grip panels should be removed one at a time. Take the right grip off first, and lift off the magazine catch spring.



- 11.** Remove the magazine catch toward the right.



- 12.** Remove the trigger bar toward the right.



13. Remove the trigger bar spring from its recess on the right side.



14. Remove the left grip, and lift off the slide-latch.



15. With the hammer in cocked position, insert a small tool such as a screwdriver or a pointed drift in the access hole near the upper curve of the frame backstrip, to catch and restrain the hammer spring plunger.



16. Gently pry the safety click plate outward, off the ends of the two pins. Remove the plate outward.



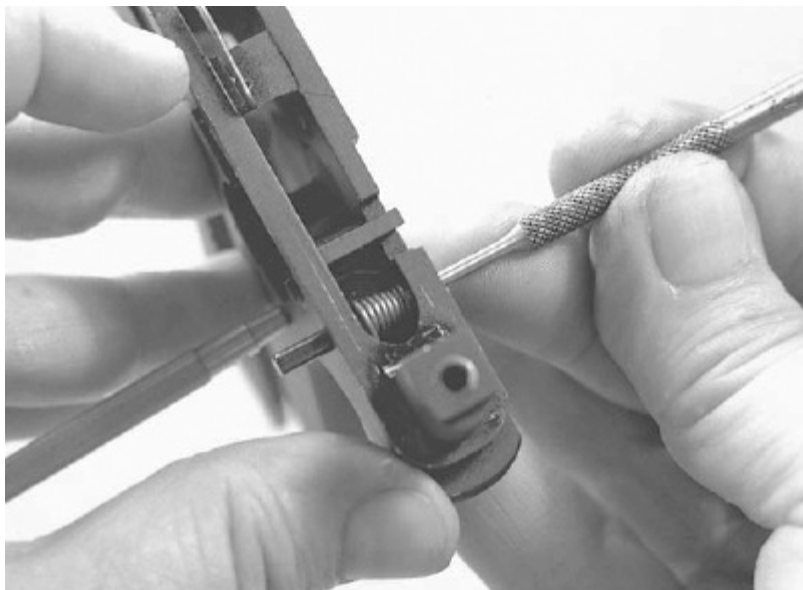
- 17.** Push the sear forward, and turn the hammer up to its fired position. Push the hammer pivot pin out toward the left. If necessary, the slide latch spring can be detached from its groove in the end of the hammer pivot pin.



- 18.** Remove the hammer upward. The hammer strut can be separated from the hammer by driving out the cross-pin, but in normal takedown it is best left in place.



- 19.** Tip the safety catch outward at the rear, and remove it toward the left.



- 20.** Push out the sear spring retaining pin toward the left. The spring will be released downward into the frame—hold a shop cloth around the frame to catch it.



21. Push the sear pivot pin out of the frame toward the left.



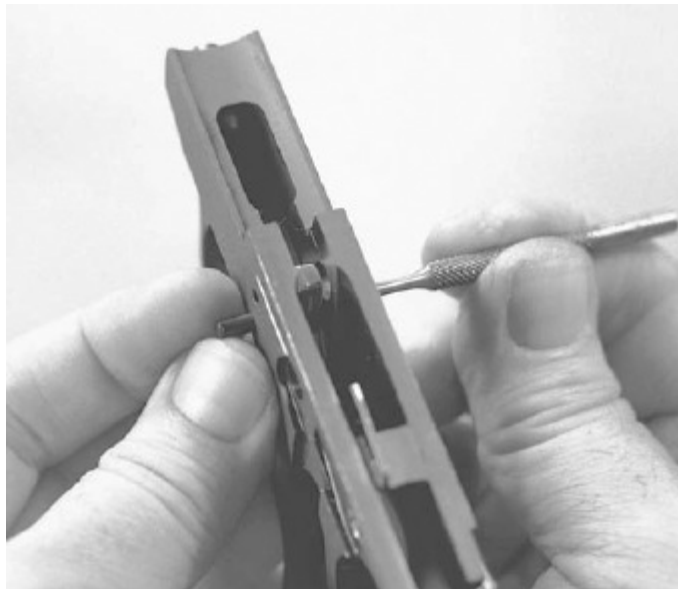
22. Remove the sear upward.



- 23.** Hold a thick shop cloth over the top of the frame, and remove the tool (see Step 15) that is holding the hammer spring plunger in depressed mode. After the cloth has caught the expelled plunger and spring, remove them from the top of the frame. **CAUTION:** *This is a strong spring. Use a heavy cloth to cushion its impact.*



- 24.** Through the access hole on the left side of the frame, use a punch of the proper size to drive out the trigger bar pin toward the right.



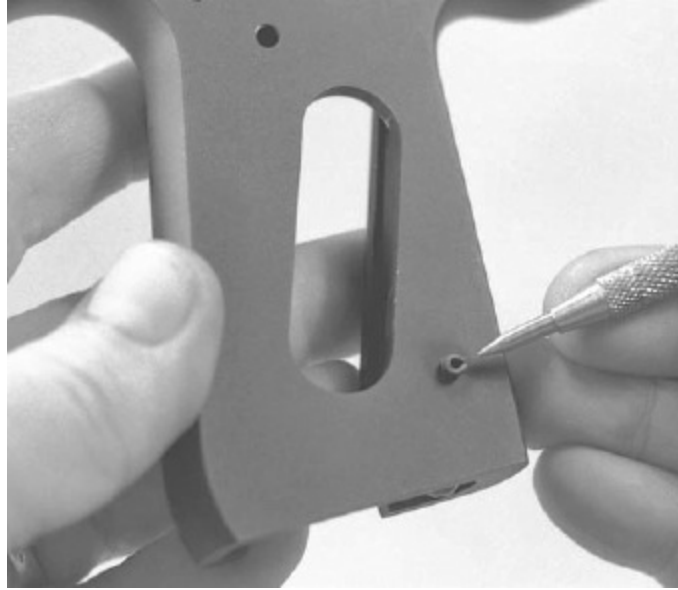
- 25.** Drift out the trigger pin.



- 26.** Turn the trigger to the position shown, and remove it from inside the guard.



- 27.** The ejector is staked in place on top of the frame, and unless necessary for repair, it is best left in place. If removal is necessary, it can be levered out from the top, or driven out with a slim punch from below.



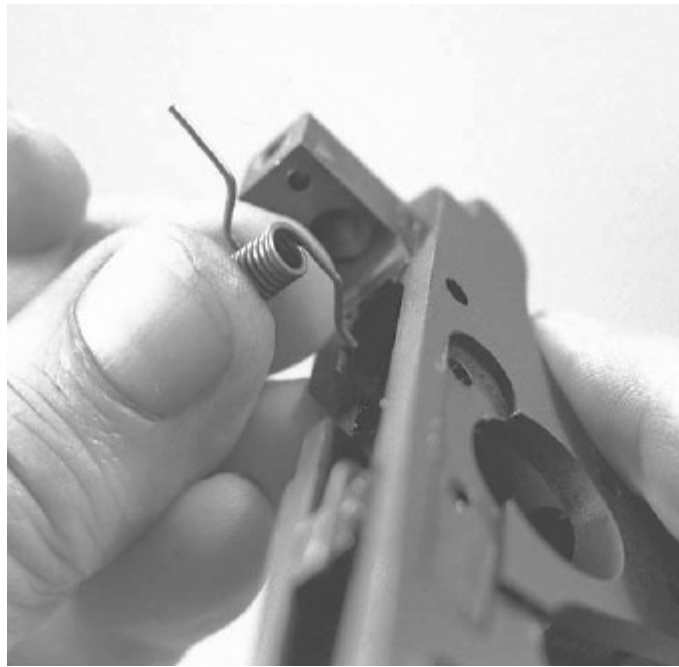
- 28.** Drifting out the roll pin in the lower front of the grip frame will release the magazine ejector and its spring for removal downward.

Reassembly Tips:



- 1.** When releasing the trigger bar pin in the top of the trigger, note that it must protrude slightly above the level of the frame slide. If

driven in too far, its left tip will enter the access hole and lock the trigger.



2. When installing the sear spring, be sure it is oriented as shown, with the long arm upward and the shorter arm below.

When replacing the sear, grip its top with slim pliers, and use the notch in its lower portion to press down the arm of the spring, aligning the hole for insertion of the pin. **CAUTION:** *The torsion-type spring is capable of sending the sear quite a distance. Keep a good grip on it.*

When replacing the recoil spring unit, remember that the flat of the front mounting lug goes downward, and the beveled corners upward.

When replacing the sight base, remember to place the two lock washers on top of the frame and barrel before the base is set in place. Note that the short screw goes at the front, the long one at the rear.

Browning BDA 380



Data: Browning BDA 380

Origin: Italy

Manufacturer: Armi Beretta, S.p.A.,
Gardone (Brescia)
for Browning Arms Co.
Morgan, Utah

Cartridge: 380 ACP

Magazine capacity: 13 rounds

Overall length: 6³/₄ inches

Height: 4³/₄ inches

Barrel length: 31³/₁₆ inches

Weight: 23 ounces

Made for Browning by Beretta of Italy, the BDA 380 is essentially a restyled version of the Beretta Model 84, but the changes are extensive enough to give it mechanical features that are entirely different. This is particularly true of the safety and firing pin system, as the BDA has a slide-mounted safety with ambidextrous levers. A hammer-drop system is included in this system, and this also changes the frame components.

Field Strip:



1. Remove the magazine, and depress and hold the takedown-latch lock button, located on the left side of the frame.



2. Turn the takedown-latch lever on the right side of the frame down to the vertical position.



3. Move the slide and barrel assembly forward off the frame.



4. Controlling the tension of the recoil spring, lift the rear of the spring guide away from the barrel, and remove the spring and guide toward the rear.



5. Move the barrel slightly forward, then remove it downward and toward the rear. **Gun is now field-stripped.**



Browning BDA 380 field-stripped

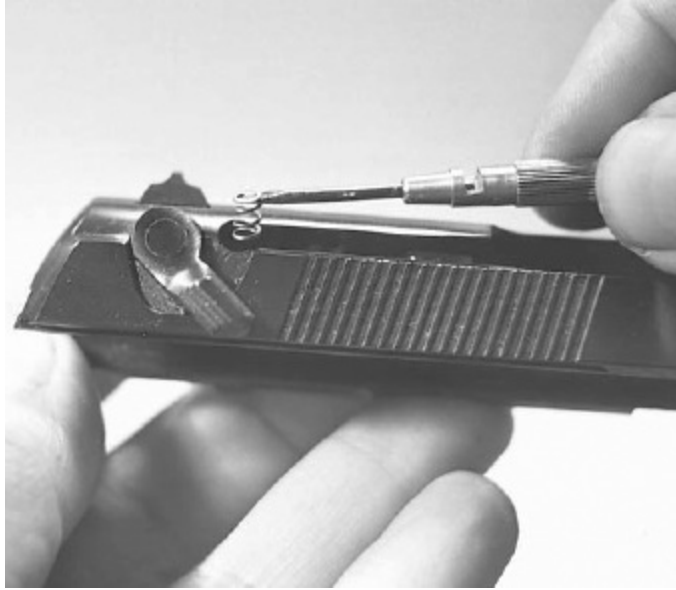
Detail Strip:



6. The extractor pin is drifted out upward.



7. With the safety in the on-safe position, remove the extractor toward the right.



8. Remove the extractor spring from its recess in the slide.



9. Use a small roll pin punch to drift out the roll pin in the base of the right safety-lever, downward.



- 10.** Turn the safety-lever upward to clear its lower tab, and remove it toward the right.



- 11.** Move the safety toward the left until it stops, and remove the firing pin from the rear of the slide. The safety must be in the off-position.



- 12.** Be sure the firing pin spring is at the front of its tunnel, and remove the safety toward the left. The safety positioning ball and spring are staked in place, and should not be removed.



- 13.** Remove the firing pin spring from the slide.



- 14.** Depress the takedown-latch lock button, turn the lever up to vertical position, and remove the latch toward the right.



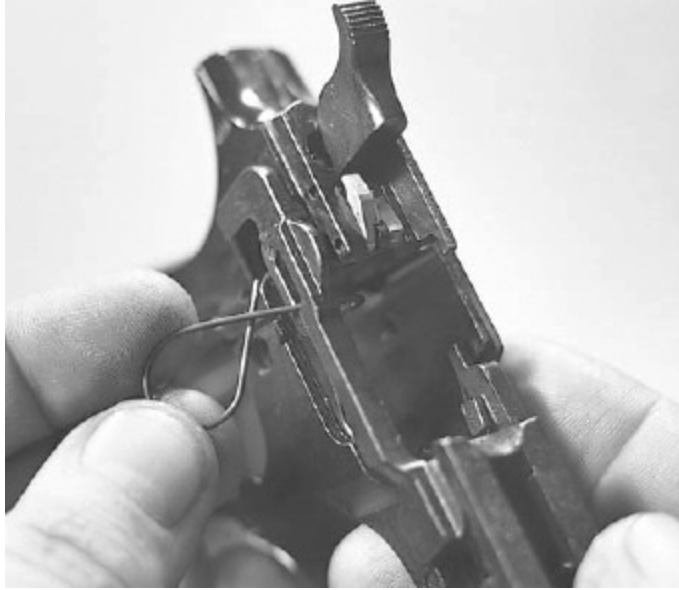
- 15.** Remove the grips, using a screwdriver with a wide and very thin blade. If necessary, grind or file one to fit.



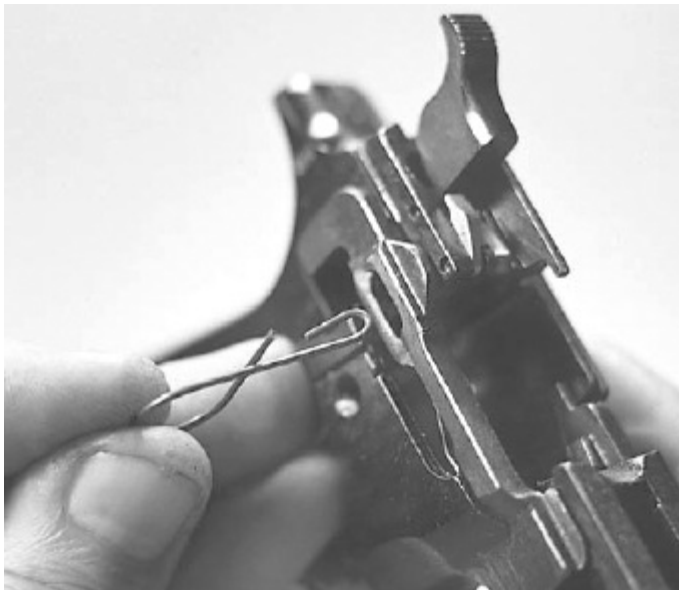
- 16.** Using the same screwdriver, remove the upper grip screw escutcheon on the right side.



- 17.** With a tool or fingertip, unhook the lower arm of the magazine safety spring from its notch in the frame.



18. Lift the spring out of its slot in the frame, and move it inward to clear its upper loop from the opening in the trigger bar.



19. Turn the spring, and remove it toward the right.



- 20.** Flex the upper arm of the trigger bar spring downward and outward, disengaging it from its slot in the underside of the trigger bar. Pull the trigger to give clearance, and lift the spring out of its recess.



- 21.** Remove the trigger bar toward the right.



- 22.** The cross-shaft of the slide latch is also the trigger pivot. Lift the slide latch at the rear to clear the frame, and move it slightly toward the left. Insert a small screwdriver to disengage the upper arm of the slide latch spring from its shelf in the frame.



- 23.** Remove the slide latch toward the left, and take off its spring.



24. Remove the trigger spring upward.



25. Tip the top of the trigger down into the rear of the guard, and remove it toward either side.



26. Remove the takedown-latch lock button toward the right.



27. Insert a tool to push the longer left block in the rear of the magazine catch toward the right, while pushing the catch toward the left, into the magazine well.



- 28.** When the right end of the catch clears the frame, swing it inward toward the rear, and remove the catch from the frame. For left-handed shooters, the catch can be installed in reverse.



- 29.** The retaining blocks and magazine catch spring can be removed, if necessary, by tipping the blocks outward. Control the spring during removal.



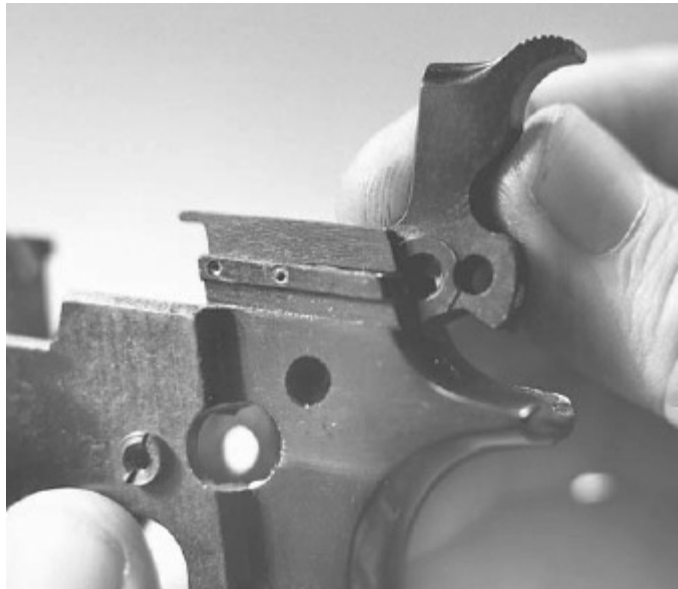
- 30.** With the hammer in fired position, drift out the large roll cross-pin at the lower rear of the grip frame.



- 31.** The hammer spring base should be forced out when the pin is removed. If it is tight, cocking the hammer will exert pressure to force it out. Remove the base plug from the bottom of the grip frame.



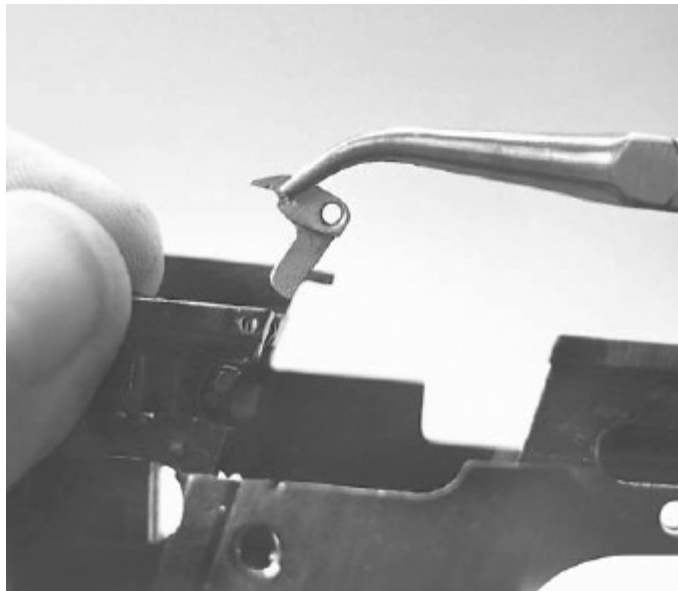
- 32.** Remove the hammer spring and hammer strut from the bottom of the grip frame.



- 33.** Push out the hammer pivot toward the left. Remove the hammer, upward and toward the rear.



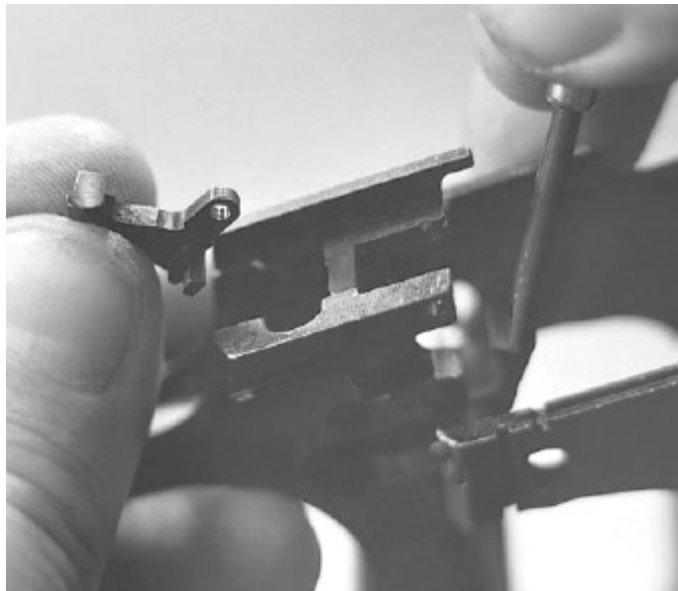
- 34.** Restrain the hammer block to avoid loss of the plunger, and drift out the small roll pin at the top of the frame, just behind the magazine well.



- 35.** Keeping the hammer block under control, remove the safety sear trip (hammer-drop lever) toward the front and upward.



- 36.** Keep a fingertip over the rear to arrest the plunger, and move the hammer block toward the left. Ease out the plunger and spring, and remove them upward.



- 37.** Insert a tool to tip the sear forward, and hold it there. Move the hammer block toward the left, then remove it toward the rear.

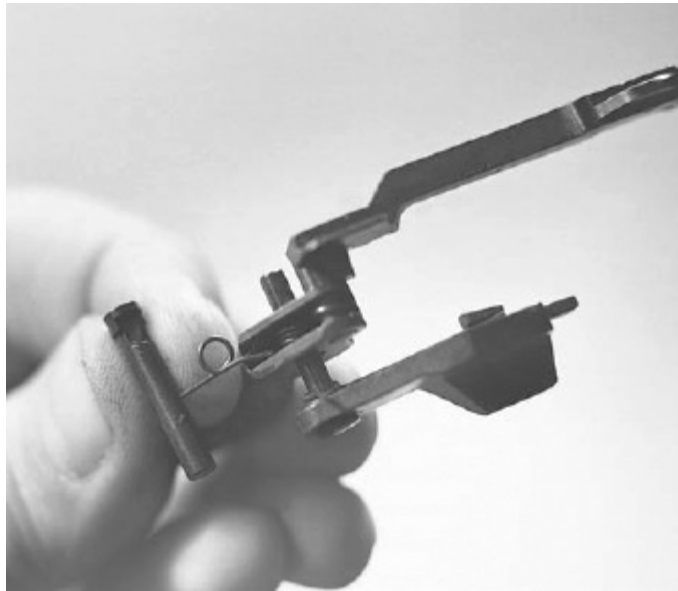


- 38.** Drifting out the small roll pin below the sear pivot will release the lower tail of the sear spring, relieving its tension. Drifting out the sear pivot pin will release the sear and its spring for removal forward, into the magazine well.



- 39.** Drifting out the other small roll pin at the top of the frame will free the ejector for removal upward.

Reassembly Tips:



1. The trigger, trigger spring, trigger bar, slide-latch, and takedown-latch release button are shown in the position they occupy in the frame. When installing the trigger bar, be sure the rear arm of the trigger spring is lifted to bear on the internal pivot of the bar. Also, be sure the forward tip of the spring enters its hole in the takedown-latch release button.

When replacing the hammer block in the frame, take particular care that the plunger and spring do not get away.

Browning Hi-Power



Data: Browning Hi-Power (P-35)

Origin: Belgium

Manufacturer: Fabrique Nationale
d'Armes de Guerre (FN),
Herstal

Cartridge: 9mm Luger (Parabellum)

Magazine capacity: 13 rounds

Overall length: $7\frac{9}{16}$ inches

Height: 5 inches

Barrel length: 4³/₄ inches

Weight: 32 ounces

John M. Browning's last pistol design, the Hi-Power has been in continuous production since 1935, and is the standard and military sidearm of Belgium, England, Canada, and a number of other countries. It is also popular as a sporting and defense arm in the U.S., and is sold here by Browning in a slightly modified version, the one shown here. The main changes from the original (after about 1974) were in the extractor, sear lever pivot, and the shape of the hammer spur.

Field Strip:



1. Remove the magazine and use the safety to lock the slide open.



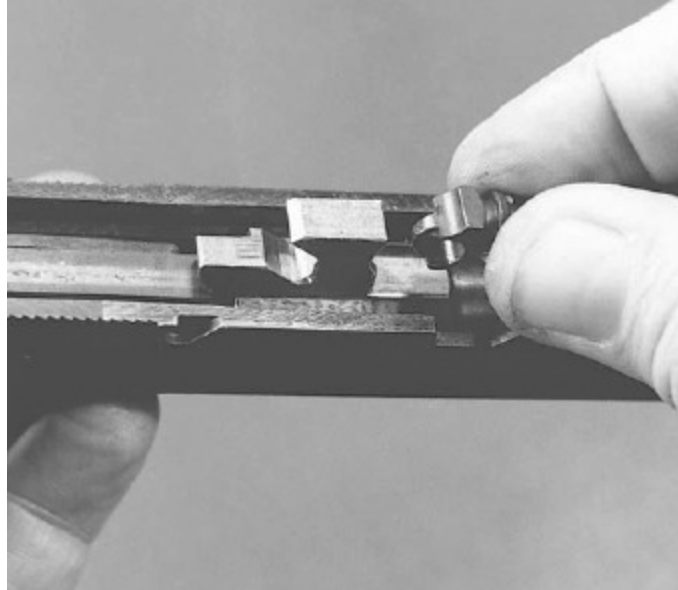
2. Push slide-latch up, and start it out of the frame by pushing on the exposed end of its shaft on the opposite side.



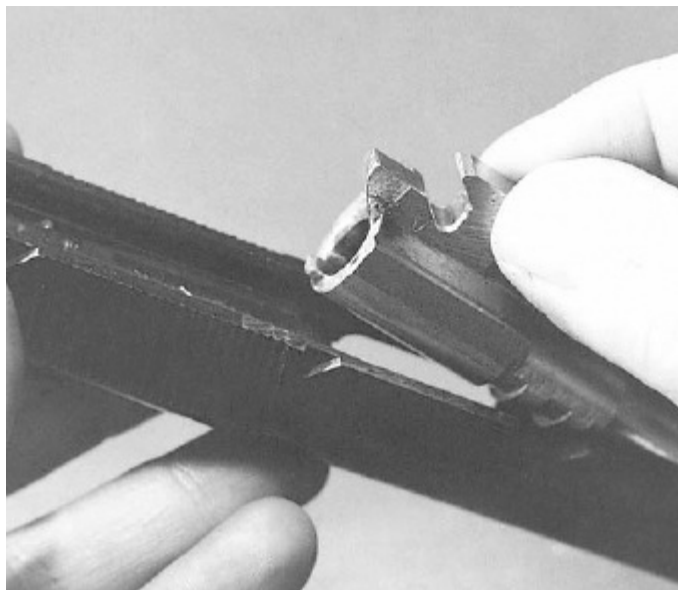
3. Remove the slide-latch from the left side of the frame.



4. Holding the slide against the spring tension, release the safety and run the slide and barrel assembly forward off the frame.



5. Move the recoil spring guide forward, out of engagement with its recess in the underlug of the barrel, and remove the recoil spring and guide. The forward end of the guide has a recessed screw which will release the internal spring and ball that supply slide latch tension.

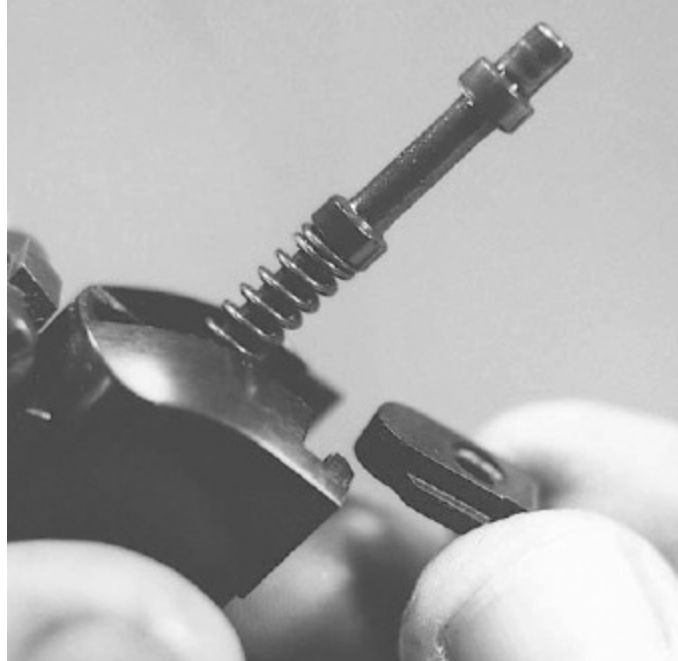


6. Lift the barrel at the rear and remove it from the underside of the slide. **Gun is now field-stripped.**

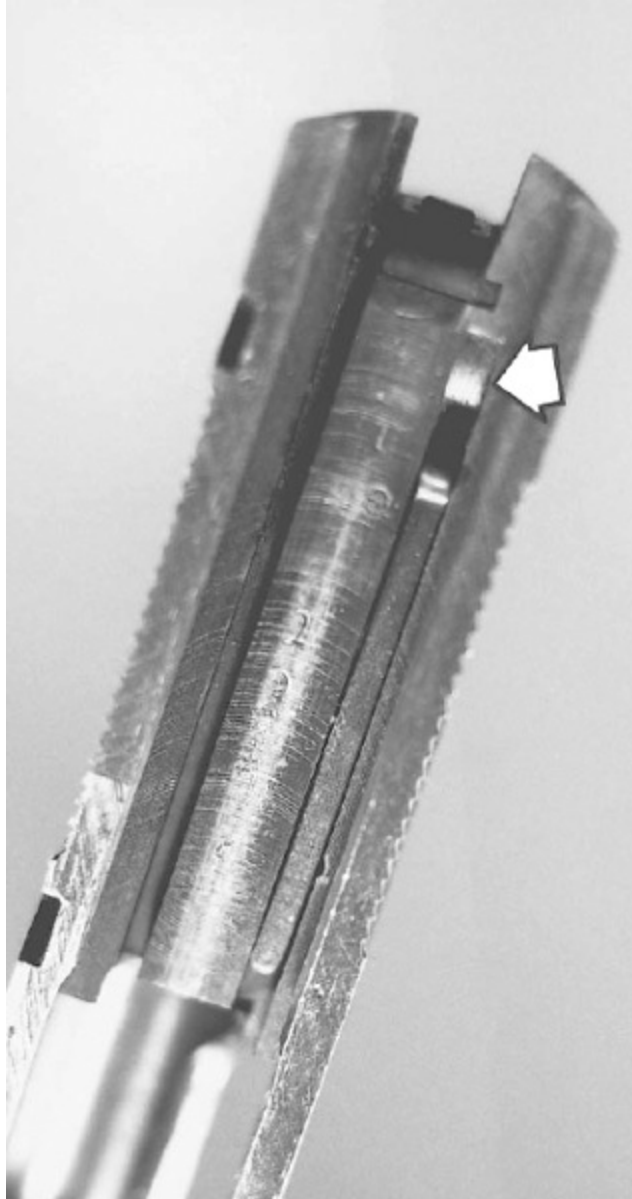


Browning Hi-Power field-stripped

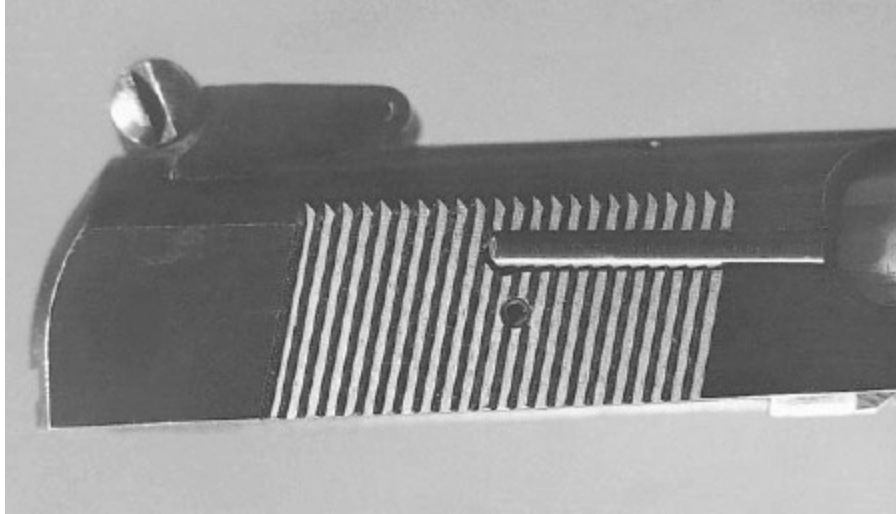
Detail Strip:



7. Depress the firing pin with a drift of the proper size, and slide the firing pin retainer down and off to release the firing pin and spring for removal. **CAUTION:** *This spring is under tension so ease it out!*



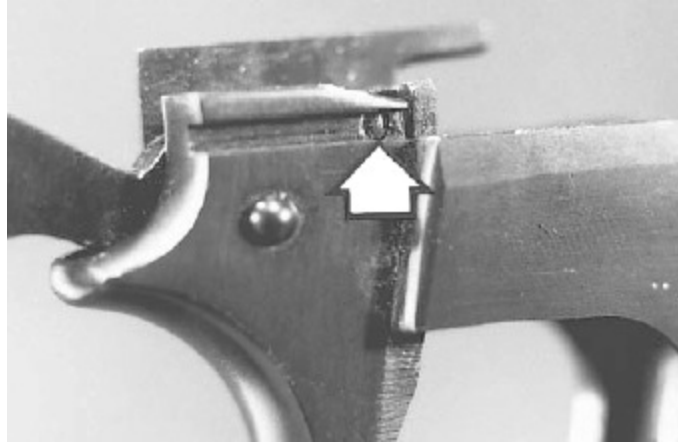
8. The sear lever (arrow) lies in a recess on the right underside of the slide. On older pistols, the extractor is removed in the same manner as our Model 1911 pistol, and this will release the sear pivot and its plate to be removed from the right side of the slide. Shown in the photo is the current model, which has a different system.



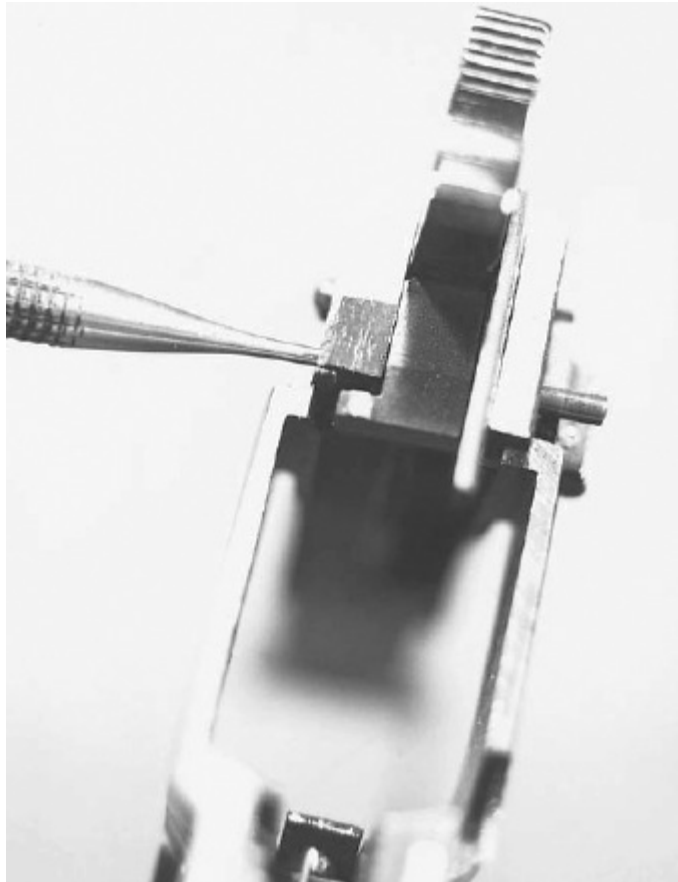
9. On current Hi-Powers, the sear pivot is a simple rolled cross-pin, located just below the extractor tail in this photo. Drifting out this pin will release the sear lever for removal from the underside of the slide.



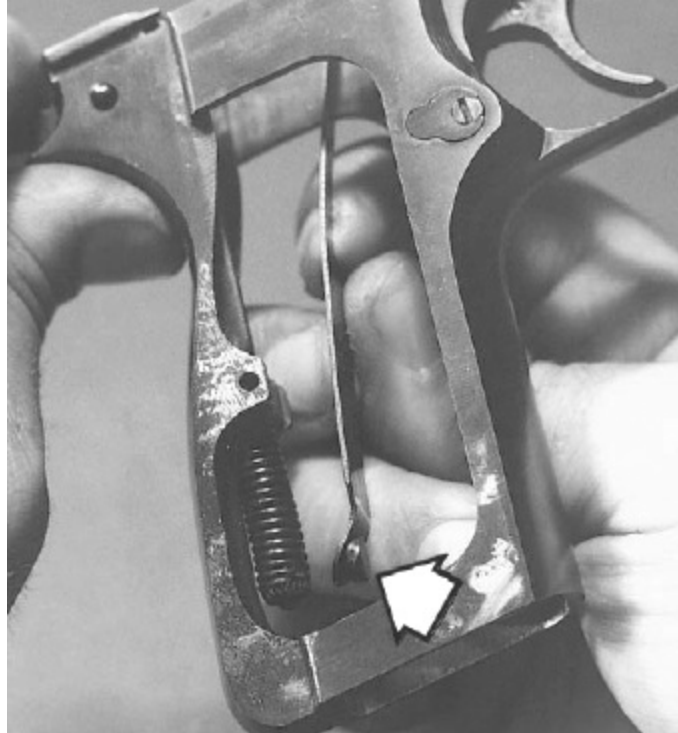
10. On current models, the extractor and its coil spring are released by drifting out a single vertical rolled pin.



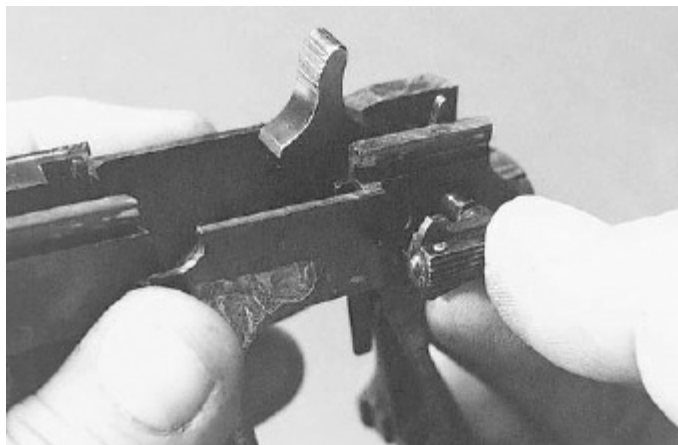
- 11.** The sear pivot pin (arrow) which also stabilizes the ejector, is located at the top rear of the frame, in the slide track.



- 12.** With the hammer down, drift out the sear pin and remove the sear from the top of the frame.



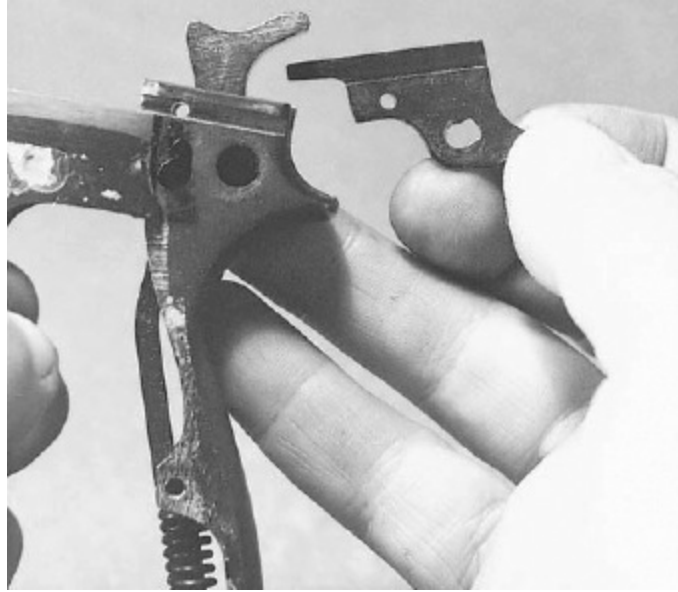
- 13.** Draw the hammer back to compress the mainspring upward, and lift the sear spring stud (arrow) from its recess at the bottom of the grip frame. Remove the sear spring forward, into the magazine well.



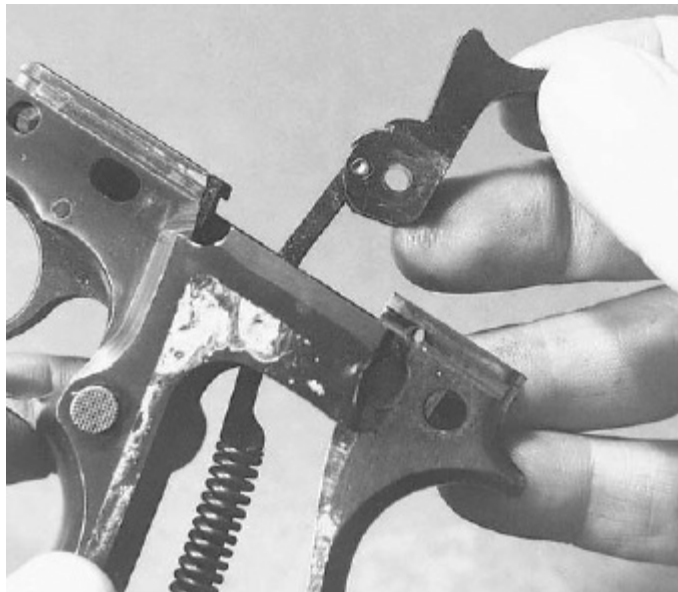
- 14.** Rotate the ejector (arrow) forward and down to free the safety catch.



- 15.** The safety can now be removed from the left side of the frame. Driving out the small vertical pin in the safety will release the detent plunger and spring.



- 16.** Removal of the safety will release the ejector, which is lifted out the top of the frame.



- 17.** The hammer and its attached strut and spring are now moved forward to clear the spring from its shelf in the frame, and lifted out the top. The strut is cross-pinned to the hammer, and the spring is held by an adjustment nut and tiny cross-pin at the lower end of the strut.



- 18.** The magazine release is retained by a screw-slotted catch on the right side. Push in the catch button until it is level with the frame, turn the slotted retainer toward the left, and remove the catch assembly toward the right side. The retainer and spring are removed by turning the slotted piece back toward the right.

CAUTION: *Spring is under tension; ease it out!*



19. The trigger pin is retained by a groove at its center, and pressure of an arm of the trigger spring. After the pin is drifted out, the trigger is moved forward and rotated down into the guard for removal. Cross-pins in the trigger hold the trigger spring, magazine safety and its spring. The trigger lever is held in place by an arm of the trigger spring, and by a half-loop at the rear of the trigger. It is easily removed. Note the relationship of these parts before disassembly!

Reassembly Tips:

When replacing the hammer spring on the strut, turn the nut down to clear the cross-pin hole, insert and center the cross-pin, then back the nut off to retain the pin.

When installing the trigger lever on the trigger, be sure the rear arm

of the trigger spring lies in the deep notch in the trigger lever.

Note that the loop on the recoil spring guide is offset to insure proper centering of the unit. The raised lug on the guide must protrude below the barrel underlug, and the sides of the guide must align with the lug sides.

When replacing the slide latch, remember that it will enter only when its upper edge is aligned with the lower edge of the slide.



1. To hold the sear spring and hammer in the right position for installation of the sear and sear pin, two spring-type clothespins make handy clamps.

Colt Mustang

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Mustang also apply to the following guns:

Colt Government Model 380

Colt Mustang Plus II

Colt Mustang Pocket Lite



Data: Colt Mustang

Origin: United States

Manufacturer: Colt's Manufacturing
Company, LLC,

Hartford, Connecticut

Cartridge: 380 ACP

Magazine capacity: 5 rounds

Overall length: 5¹/₂ inches

Height: 4 inches

Barrel length: 2³/₄ inches

Weight: 18¹/₂ ounces

A reduced-size version of the Colt 380 Government Model pistol, the Mustang has a mechanically-locked breech. There are two alternate versions of the Mustang—the Pocket Lite, with an alloy frame, and the Plus II, which uses the grip frame of the 380 Government Model and holds two extra rounds. All four guns are mechanically identical, and the instructions will apply.

Field Strip:

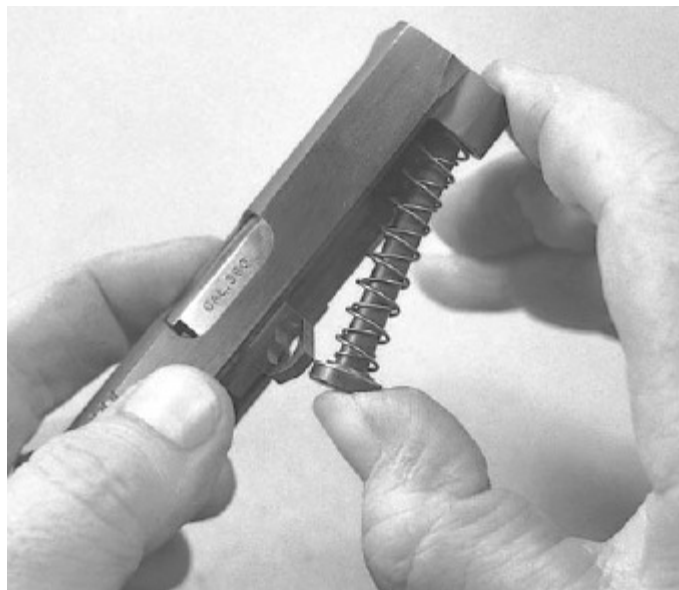


1. With the magazine removed and the hammer cocked, retract the

slide until the rear tip of the slide-latch aligns with the semi-circular cut in the lower left edge of the slide, and remove the slide-latch toward the left.



2. Remove the slide and barrel assembly toward the front.



3. Tilt the recoil spring guide out of its engagement with the barrel underlug, and remove it. If the springs are removed from the guide, take care that the metal washer at the rear is not lost.

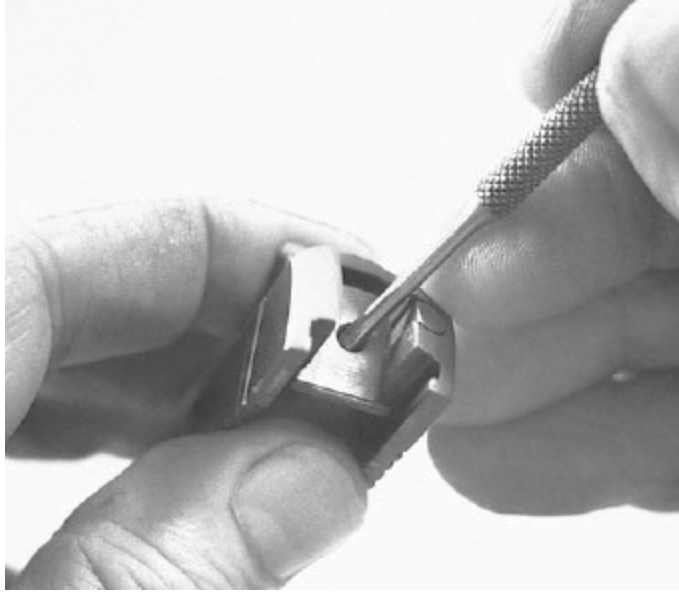


4. Move the barrel slightly forward to clear the extractor, and take it out from the underside of the slide. **Gun is now field-stripped.**



Colt Mustang field-stripped

Detail Strip:



5. Depress the firing pin head with a small tool, and slide the retaining plate downward. **CAUTION:** *The firing pin spring is under tension. Ease it out.*



6. Remove the firing pin and its spring toward the rear.



- 7.** With a small tool, nudge the extractor toward the rear, and remove it.



- 8.** To remove the automatic firing pin block and its spring, it is necessary to drift out the rear sight toward the right. The block and spring are then taken out upward.



- 9.** Removal of the slide-latch spring requires that a small tool be inserted near its in-turned tip to lever it outward. Unless replacement is needed, it is best left in place.



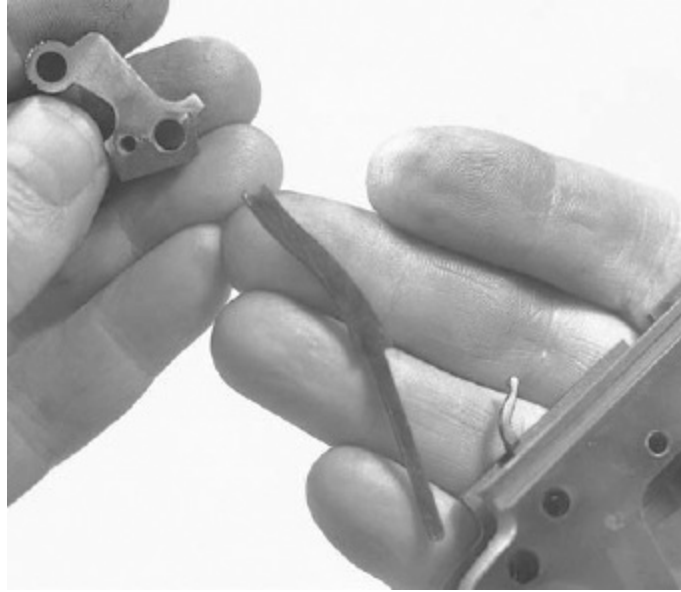
- 10.** Depress the magazine catch fully, and turn the screw-headed retainer counterclockwise until it stops. Remove the magazine catch toward the right. Turning the retainer the other way will release the retainer and spring for removal. **CAUTION:** *The spring is under tension, control it.*



- 11.** With the hammer let down gently to fired position, push the safety upward, beyond its normal on-safe position. **CAUTION:** *The safety positioning detent and spring will be released as the safety is turned up, and will jump out—restrain them.* Remove the safety toward the left.



- 12.** Exert downward pressure on the hammer, and push out the hammer pivot toward the left.

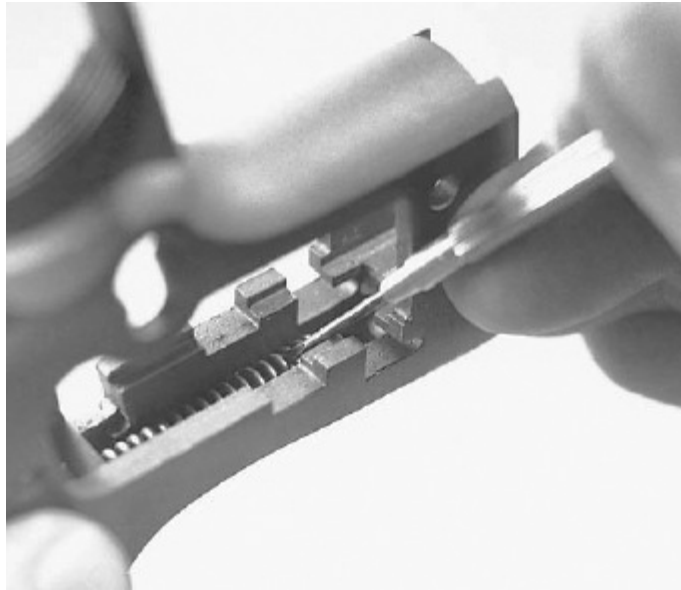


- 13.** When the pivot pin is out, the hammer and its strut can be removed from the top of the frame. The hammer spring will stay in the frame, and it is removed later.



- 14.** Insert a small tool in the hole near the lower end of the combination sear and firing pin lock lever spring, and move the spring upward until it clears its retaining cut in the frame. The

spring is then removed through the magazine well.



- 15.** The hammer spring can now be nudged out of its recess and removed upward.



- 16.** Pushing out the pivot pin toward the left will release the sear and firing pin lock lever for removal from the top of the frame.



- 17.** If the trigger and trigger bar are not to be taken out, but the disconnecter needs replacement, the trigger bar can be flexed to its lowest point, and the disconnecter slid down and over it for removal.



- 18.** Drifting out the trigger pin toward the left will allow removal of the trigger and trigger bar toward the rear. A small cross-pin in the trigger pivots and retains the trigger bar. If the trigger and bar are separated, take care not to lose the small coil spring

inside the trigger.

Reassembly Tips:



1. When replacing the sear, note that its proper orientation in the frame is as shown.



2. Before replacing the slide on the frame, it is necessary to tip the firing pin lock lever over forward, until it snaps into its "down"

position, to clear the slide. Insertion of the magazine will automatically restore the lever to operating position.

Colt 32 Pocket Auto

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Pocket Auto also apply to the following guns:

Colt Pocket Auto First Issue

Colt Pocket Auto Second Issue

Colt Pocket Auto Third Issue



Data:	Colt 32 Pocket Auto
Origin:	United States
Manufacturer:	Colt's Manufacturing Company, LLC Hartford,

	Connecticut
Cartridge:	32 ACP
Magazine	8
capacity:	rounds
Overall length:	6 ¹ / ₁₆ inches
Height:	4 ⁷ / ₁₆ inches
Barrel length:	3 ³ / ₄ inches
Weight:	24 ounces

Colt officially listed this gun as the Model M, but most people simply refer to it as the “Colt Pocket Auto.” Designed by John M. Browning, it was first offered in the 32 ACP chambering, then later in 380 ACP, but the 32 was made in larger quantity. Guns made very early in the production run have a different barrel and a separate barrel bushing at the muzzle, along with other small differences, but mechanically they are essentially the same. The Colt Pocket Auto had one of the longest continuous production runs of any pocket auto, from 1903 to 1946.

Field Strip:



1. On the lower right front of the slide is stamped a small arrow pointing to a line, a guide to the proper position of the slide for disassembly.



2. With the magazine removed and hammer cocked, move the slide to the rear until the line indicated by the arrow is even with the front edge of the frame. While holding it there, turn the barrel to the left (counterclockwise from a front view) until it stops.

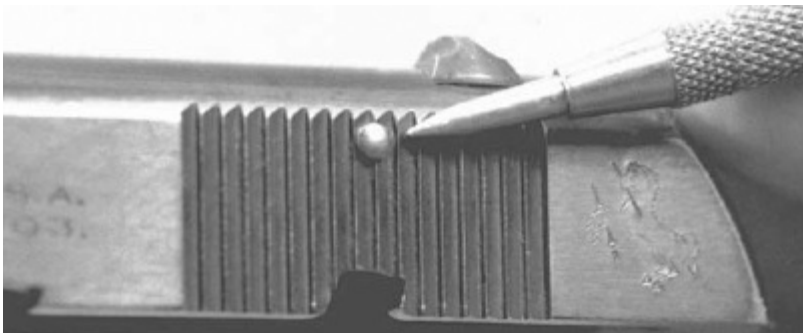


- 3.** Ease the slide and barrel assembly forward off the frame. **Note:** There may be slight hesitation as the rear of the slide passes over the hammer and pushes it down. You might have to help it along. Remove the recoil spring and its guide. Turn the barrel back to its original position and withdraw it from the front of the slide. **Gun is now field-stripped.**



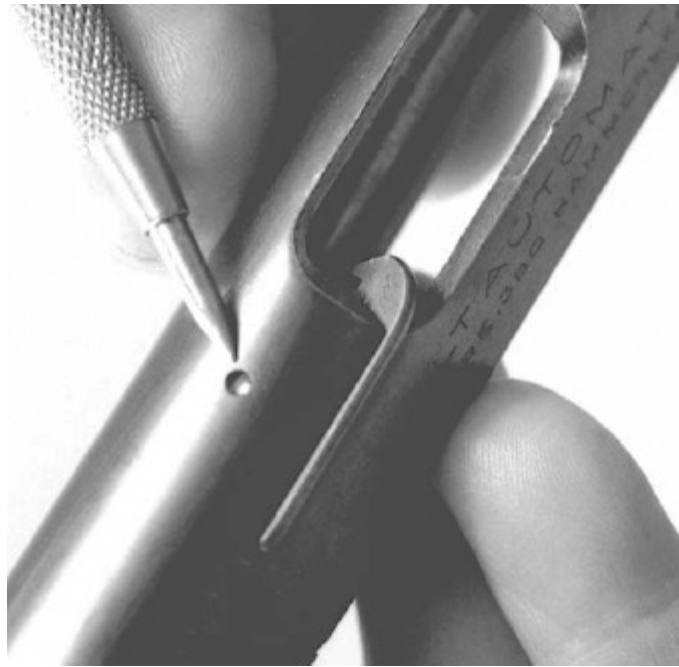
Colt 32 Pocket Auto field-stripped

Detail Strip:



4. The firing pin system is retained by a cross-pin located at the top center of the slide serrations. Note that there are three parts in

this system—the return spring, front section (the true firing pin), and rear section.



5. The extractor and its spring are retained by a vertical pin in the slide.



6. The slide end plug is driven toward the rear for removal.



- 7.** The grip safety pin is located at the lower rear edge of the grip frame.



- 8.** With a drift punch of the proper size, drive out the grip safety pin.



9. This will release the grip safety to swing outward, but it is not yet removable, as its upper front projections are engaged with corresponding surfaces at the rear of the sear. The hammer/grip safety spring, sear/disconnector spring, and the magazine catch can be removed at this point, but I prefer to leave them in place until the hammer and safety-lever are removed and the grip safety taken off.



- 10.** With the lower end of the grip safety swung out, the tension of the hammer spring is reduced, but the hammer should be restrained with a fingertip for the next operation. Turn the safety up to the on-safe position and put it out toward the left. The safety cross-shaft is also the hammer pivot, and the hammer will be released as the safety is removed.



11. Remove the hammer from the top of the frame.



12. The sear will now tip far enough back to release the grip safety for removal, along with the heavy spring which powers the hammer and grip safety.



- 13.** The combination spring which powers the sear, disconnect, and magazine catch can now be removed from the back of the grip frame.



- 14.** The magazine catch can now be removed from the back of the grip frame.



- 15.** The cross-pin forward of, and slightly below, the hammer pivot hole in the frame is now driven out to release the sear and disconnector for removal. The very small pin at the top of the frame retains the ejector/cartridge guide, and this is removed from the top of the frame.



- 16.** When the sear and disconnector (not pictured) are removed, the trigger can be slid straight toward the rear and out of the frame.

Reassembly Tips:

When the firing pin system is replaced in the slide, use a slave pin of slightly smaller diameter than the cross-pin to hold the rear section in place while driving in the retaining cross-pin.

When replacing the sear/disconnector/magazine catch spring in the backstrap, be sure that its upper arms engage the rear faces of the sear and disconnector, and that its lower end is behind the magazine

catch.

Be sure that the retaining lip at the top of the magazine catch is in its rectangular opening in the frame.

Colt Woodsman

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Woodsman also apply to the following guns:

Colt Challenger

Colt Match Target

Colt Woodsman (first issue)

Colt Woodsman (third issue)

Colt Woodsman (second issue)

Colt Huntsman

Colt Targetsman

Colt Woodsman Sport (second issue)

Colt Woodsman Sport (first issue)

Colt Woodsman Target



Data: Colt Woodsman

Origin: United States

Manufacturer: Colt's Manufacturing
Company, LLC

Hartford, Connecticut

Cartridge: 22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 10¹/₂ inches

Height: 4³/₄ inches

Barrel length: 6¹/₂ inches

Weight: 28 ounces

The pistol that became the Colt Woodsman began in 1915, and in 1927 the “Woodsman” name was officially adopted by Colt. In 1932, with serial number 83,790, a heat-treated mainspring housing was added, to make the gun safe with modern high-velocity loads. The gun was slightly redesigned in 1948, and the main change that relates to takedown was an extractor that is removed by gripping its beak with pliers, rotating it downward, and pulling it out toward the front. A slide-latch was also added, but it will present no difficulty in takedown. The original Woodsman was made in Sport and Target versions, and the later production used the names Huntsman, Challenger, and Targetsman. With some small variations, the instructions for the basic original Woodsman will apply.

Field Strip:



1. With the magazine removed, pull the slide all the way to the rear, depress the small button on top, and ease the slide forward. When the recoil spring catch is properly engaged, the slide will have no spring tension. The engagement can also be checked by looking inside the underside of the slide at the rear.



2. The mainspring housing that forms the ear of the grip frame has an oblong checkered area in its upper curve that denotes the pressure point for takedown. Note that in later versions, the grips

must be taken off at this point, and the housing lock pin, near the curve of the backstrap, must be pushed out.



3. Press in and upward on the area noted above, and the lower end of the housing will spring out, as shown. Pulling the trigger to drop the hammer will make this easier. Remove the housing downward.



4. The slide may now be taken off the frame toward the rear. **Gun is**

now field-stripped.



Colt Woodsman field-stripped

Detail Strip:



- 5.** The magazine catch and the attached combination magazine catch and sear spring can now be removed downward. The magazine catch is riveted to the lower end of the spring. In

normal takedown, these parts should not be separated.



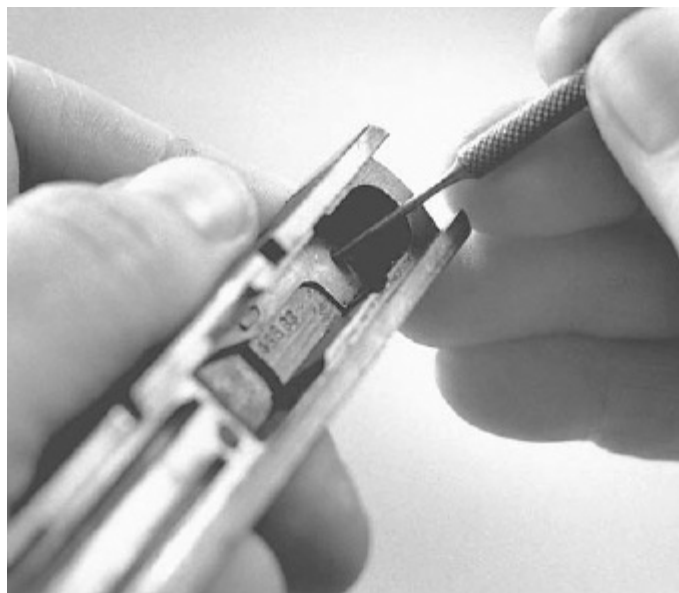
6. The hammer spring and its plunger can be removed from the housing by driving or pushing out the small cross-pin near the top of the housing. If removal is necessary, the best method is to grip the housing in a padded vise, slightly depress the plunger, and push out the pin. **CAUTION:** *The spring is compressed. Control it, and ease it out.*



7. Insert a small tool in the underside of the slide and depress the recoil spring plunger forward, to release the plunger and spring from the catch. **CAUTION:** *Control the compressed spring, and ease it toward the rear.*



8. As the spring and plunger are eased out, tip them inward, and remove them toward the rear.



9. The recoil spring catch may be removed by inserting a tool in the

hole at its rear, and sliding it forward until its flanges align with the exit cuts in the slide. The button is then removed downward. If necessary, the rear sight may be drifted out of its dovetail toward the right with a non-marring tool. Separating the adjustment screw and leaf from the base is possible, but not advisable.



10. There is an access hole behind the extractor opening, and it is possible to insert a small tool to hold the depressed plunger while the extractor is removed or replaced. However, the extractor is easily taken out by simply inserting a small screwdriver between the extractor and the plunger, depressing the plunger, and tipping the extractor out toward the front. **CAUTION:** *Control the plunger and spring, and ease them out.*



- 11.** The firing pin is retained by a screw in the underside of the slide. This is usually staked in place, and removal should be done only for repair. Taking out the screw will allow the firing pin and its spring to be taken out toward the rear.



- 12.** Remove the sideplate screw on the left side of the frame, and lift off the sideplate.



13. Remove the safety catch toward the left.



14. Remove the hammer upward. The strut is easily separated from the hammer by taking out the pivot pin toward the left.



- 15.** The trigger pivot may be nudged out toward the left, or it may be pushed from the right side of the gun.



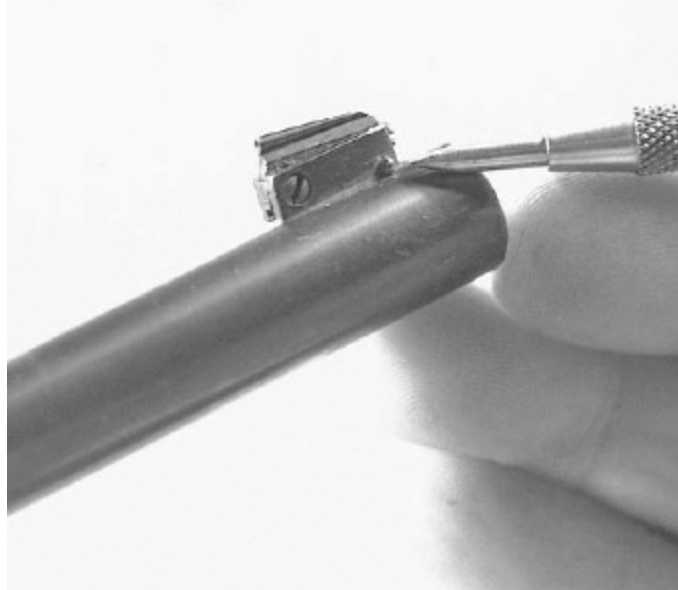
- 16.** Remove the trigger and trigger bar assembly toward the left. The torsion-type trigger spring will be released into the trigger well—be sure it isn't overlooked and lost.



- 17.** Push out the sear pivot pin toward the left, and remove the sear from inside the frame.



- 18.** A single cross-pin retains the ejector in the frame. If removal is necessary, there is an access hole inside the frame to allow driving the ejector out upward.



- 19.** To remove the front sight blade, it is necessary to drift out the small cross-pin at the front, and take out the front adjustment screw and the limit cross-screw at the rear. Take care that the small coil spring under the sight blade is not lost.

Reassembly Tips:



- 1.** The sear is shown here, outside the frame, in the proper orientation for reinsertion.



2. The trigger assembly, with the spring, pivot, and trigger bar, is shown here in the proper arrangement for reinsertion. Note that one end of the spring must bear on the bar pivot, and the other extends forward to power the trigger. When inserting the trigger assembly, use a tool to lift the front tip of the spring as the pivot is pushed into place.

When inserting the combination magazine catch and sear spring, be sure the upper tip rests on the sear, with the hammer strut behind it.

When installing the recoil spring, insert a fingertip beside its tunnel in the slide, to prevent kinking of the spring as the plunger and spring are pushed into place. Holding the plunger with a tool, depress the catch button and engage the catch tip with the end of the plunger.

Colt 1908 25 ACP

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt 1908 25 ACP also apply to the following gun:

FN Model 1906



Data:	Colt 1908 25 ACP
Origin:	United States
Manufacturer:	Colt's Manufacturing Company, LLC Hartford, Connecticut
Cartridge:	25 ACP

Magazine capacity: 6 rounds
Overall length: $4\frac{7}{16}$ inches
Height: $3\frac{1}{16}$ inches
Barrel length: $2\frac{3}{16}$ inches
Weight: $13\frac{1}{4}$ ounces

The factory designation was “Model N,” but only a few Colt collectors would have recognized that. So, it’s listed here as the “1908 25,” to separate it from the later Colt Junior, which was really an Astra Cub in disguise. John Moses Browning designed the older pistol in 1905, and it was produced by FN in Belgium in 1906. The Colt version came along in 1908, and continued in production until 1946.

Field Strip:



1. With the magazine removed and the striker in fired position, move the slide back to the position shown, aligning the exit cuts inside the lower edge of the ejection port with the barrel retaining lugs. Turn the barrel clockwise (front view) until it

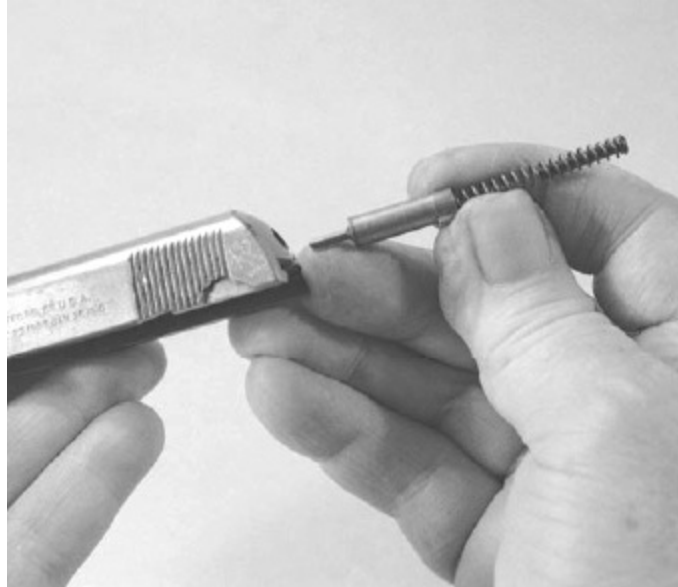
stops.



2. Remove the slide and barrel assembly toward the front.



3. Remove the recoil spring and guide from the frame. If the pistol is a later version, the magazine safety plunger and its coil spring are easily pulled out from the rear end of the guide.



4. Remove the striker, spring, and guide from the slide. The parts are easily separated.

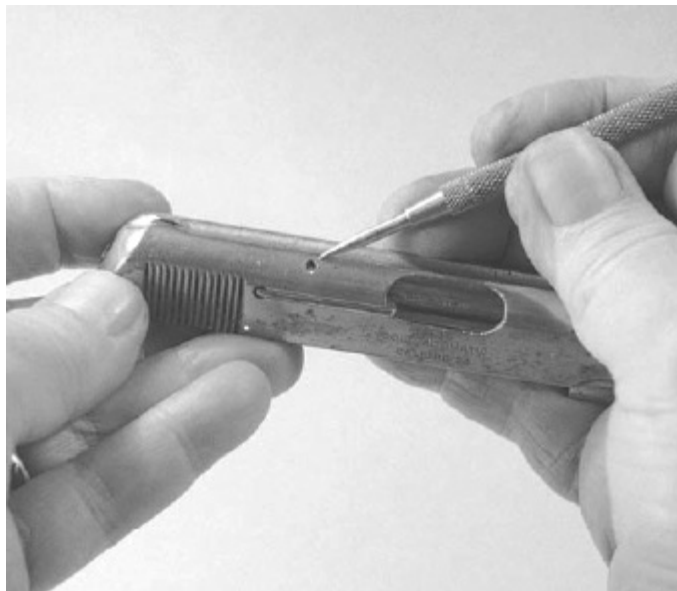


5. Turn the barrel back until the lugs are on the underside of the slide, tip it downward, and remove it.



Colt 1908 field-stripped

Detail Strip:



- 6.** Drift out the extractor pivot pin upward, and remove the extractor and its coil spring.



7. Remove the grips. Restrain the grip safety, and drift out the cross-pin at the lower rear of the grip frame.



8. Remove the grip safety.



9. Remove the combination sear and trigger bar spring.



10. Remove the magazine catch.



- 11.** Hold a thumb or finger over the rear edge of the frame to arrest the safety plunger and spring, and turn the safety lever to the position shown.



- 12.** Remove the safety positioning plunger and its coil spring.



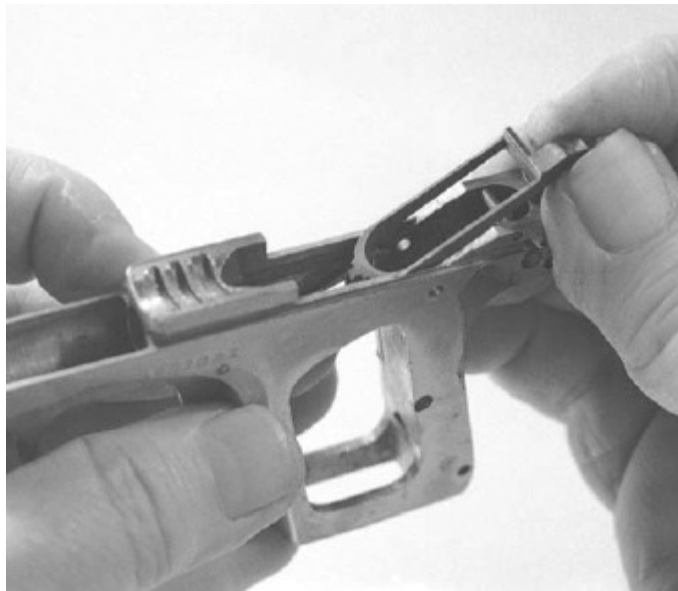
13. Remove the manual safety lever.



14. Drift out the sear pivot pin.



- 15.** Remove the sear from the frame. The sear stop pin at the top of the frame retains no part, and does not have to be removed in normal takedown.



- 16.** Remove the trigger bar disconnecter upward and toward the rear.

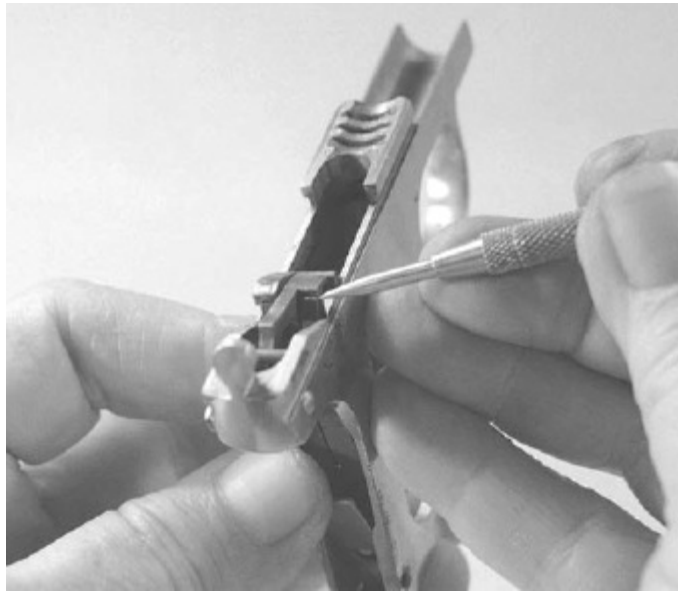


- 17.** If the pistol is a late version with a magazine safety, this part can be slid back to the position shown, then flexed and manipulated into the trigger bar recesses for removal. However, deformation of breakage is likely. It's best to leave it in place.



- 18.** Drifting out the trigger cross-pin will allow the trigger to be turned into the interior of the trigger guard for removal.

Reassembly Tips:



1. When installing the combination spring, be sure its upper arms engage the backs of the trigger bar and the sear, and that the hole in its lower end engages the stud on the back of the magazine catch.

Colt 1911 Series

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt 1911 also apply to the following guns:

Colt 1911 Series

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt 1911 also apply to the following guns:

AMT Combat Government Model

AMT Skipper

Auto-Ordnance M1911A1 Thompson

Colt Combat Grade Government

Colt Gold Cup

Colt Mark IV Series 70

Colt Super 39

Detonics Scoremaster

Federal Ordnance Ranger

Llama Model IXA

Llama Model XV

M-S Safari Arms Model 81 BD

Olympic/Safari Arms Enforcer

Randall Service Model

Springfield Armory M1911A1

Springfield Armory M1911A1 Defender

AMT Hardballer

Argentine Model 1927

Colt Combat Commander

Colt Commander

Colt Gold Cup 38 Special
Colt Mark IV Series 80
Colt National Match 45
Essex Model 1911A1
Llama Model IIIA
Llama Model XA
M-S Safari Arms Enforcer
M-S Safari Arms Model 81
BP Super
Olympic/Safari Arms
Matchmaster
Randall Raider
Springfield Armory
M1911A1 Commander
Vega 45
AMT Long Slide
Auto-Ordnance M1911A1
Pit Bull
Colt Combat Elite
Colt Delta Elite
Colt Lightweight Commander
Colt Model 1911
Colt Officers ACP
Falcon Portsider
Llama Model VIII
Llama Model XI
M-S Safari Arms Model 81
M-S Safari Arms Model 81
NM
Randall Compact Service
Model
Randall Service Model
Springfield Armory M1911A1
Compact



Data: Colt Model 1911

Origin: United States

Manufacturer: Colt's Manufacturing
Company, LLC
Hartford, Connecticut

Cartridge: 45 ACP, 38 Super,
9mm Luger

Magazine 45—7 rounds
capacity: 38/9mm—9 rounds

Overall length: $8\frac{3}{8}$ inches
(Commander—8 inches)

Height: $5\frac{3}{8}$ inches

Barrel length: 5 inches
(Commander— $4\frac{1}{2}$

inches)

Weight: 40 ounces

Our standard military pistol from 1911 to 1985, the Colt 45 Auto is so well known that it really needs no comment or background data here. The target model, the Gold Cup, has one or two small differences in the internal mechanism. The Series 80 versions have an added firing pin block safety system, consisting of a lever in the frame and a plunger and spring in the slide. These are not complicated, and should cause no takedown problems. The old Government Model has also been copied many times over the years, and the instructions will generally apply to all of these.

Field Strip:



1. With the magazine removed and the hammer down, depress the checkered button below the barrel and turn the barrel bushing toward the right side of the gun until the plug and recoil spring are free to come out. **CAUTION:** *The recoil spring is under tension, so keep strong pressure on the checkered end of the plug and ease it out.* The barrel bushing can ordinarily be turned easily with the fingers, but on some tight older guns, and especially on the new Mark IV Series 70 guns with the barrel-gripping bushing, a special wrench may be necessary.



4. Push the end of the slide stop shaft, on the right side of the gun, and remove the slide stop from the left side.



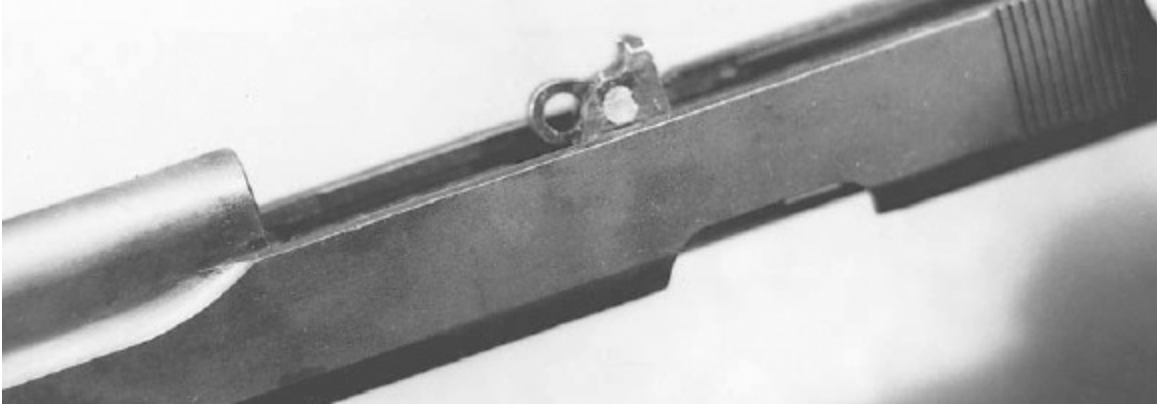
5. The slide assembly can now be run forward off the frame.



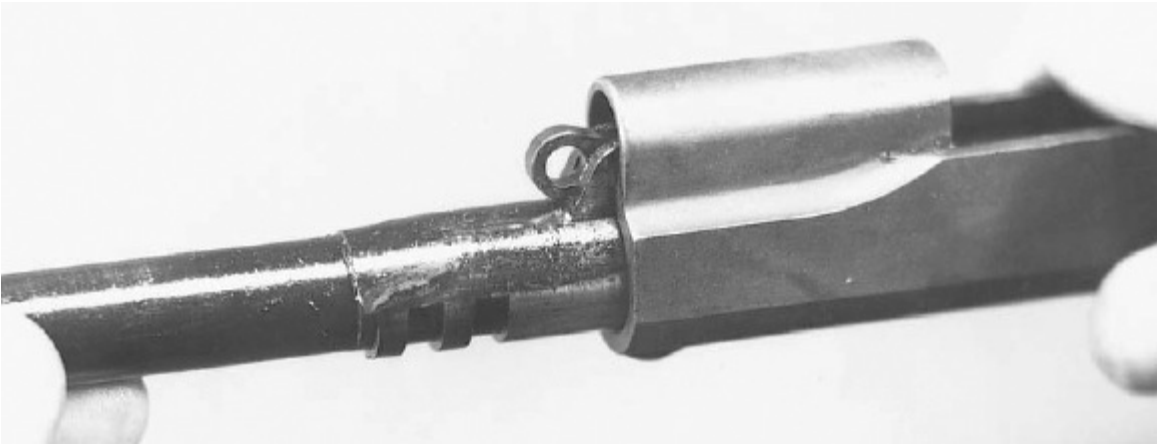
- 6.** Remove the recoil spring and its guide from the slide, together or separately.



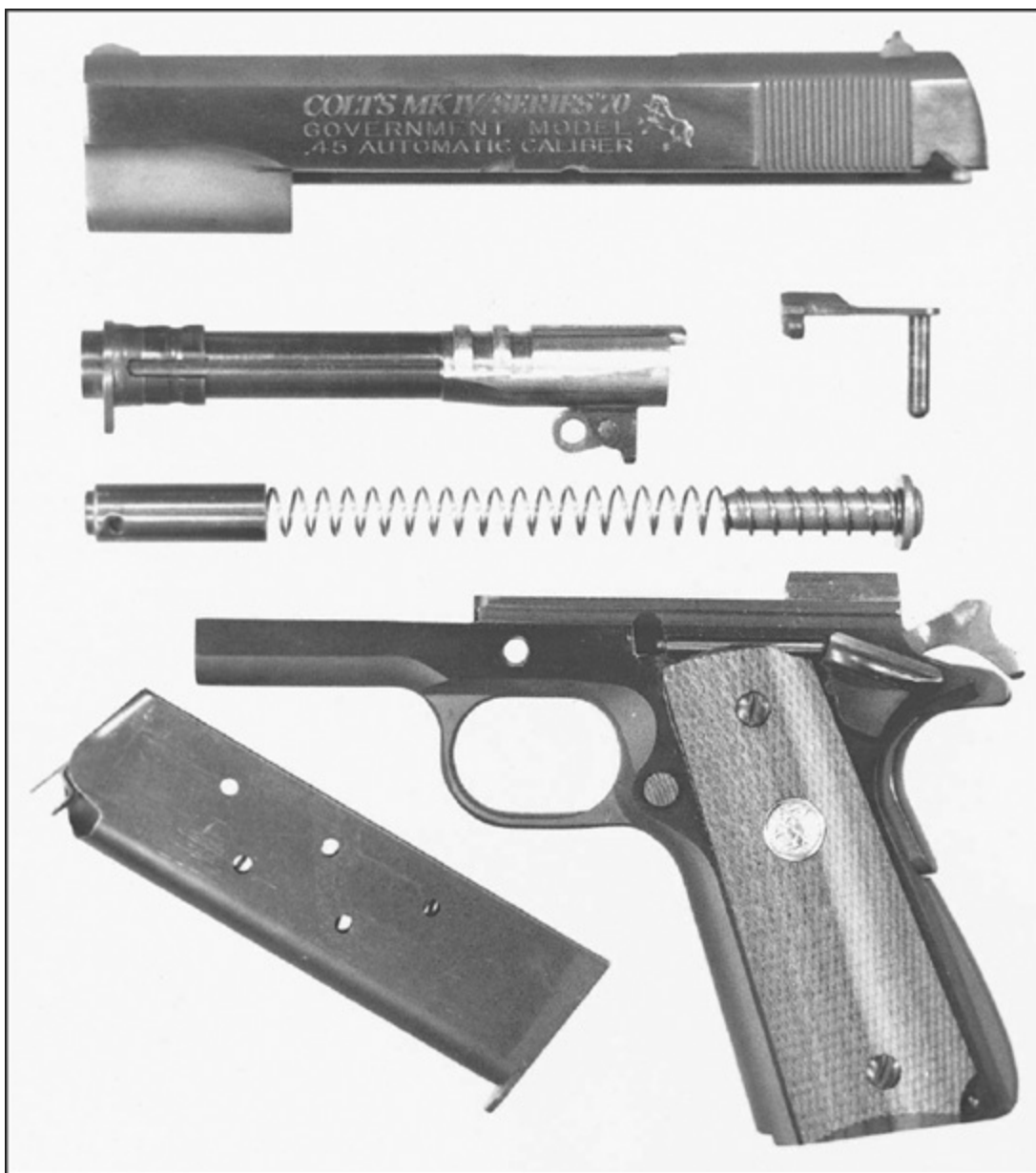
- 7.** Turn the barrel bushing back toward the left side of the slide, until its lug aligns with the opening, and remove the bushing from the front of the slide.



8. Tip the barrel link over forward to clear the recoil spring tunnel.

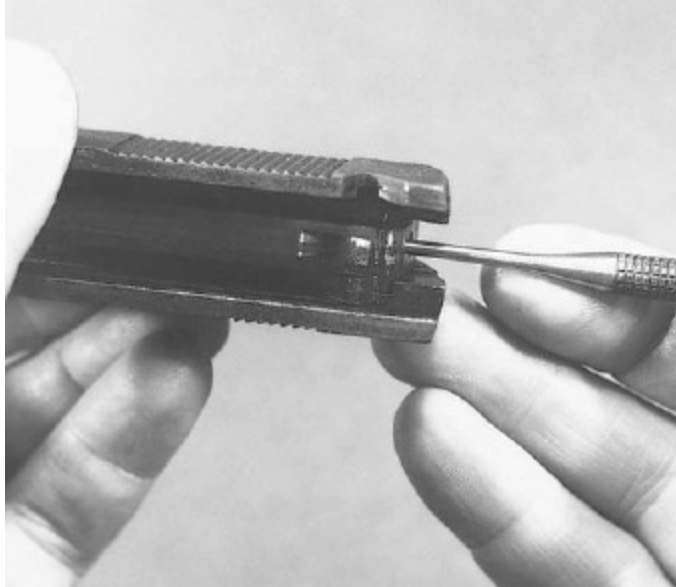


9. Remove the barrel from the front of the slide. **Gun is now field-stripped.**



Colt Mk IV/Series 70 field-stripped

Detail Strip:



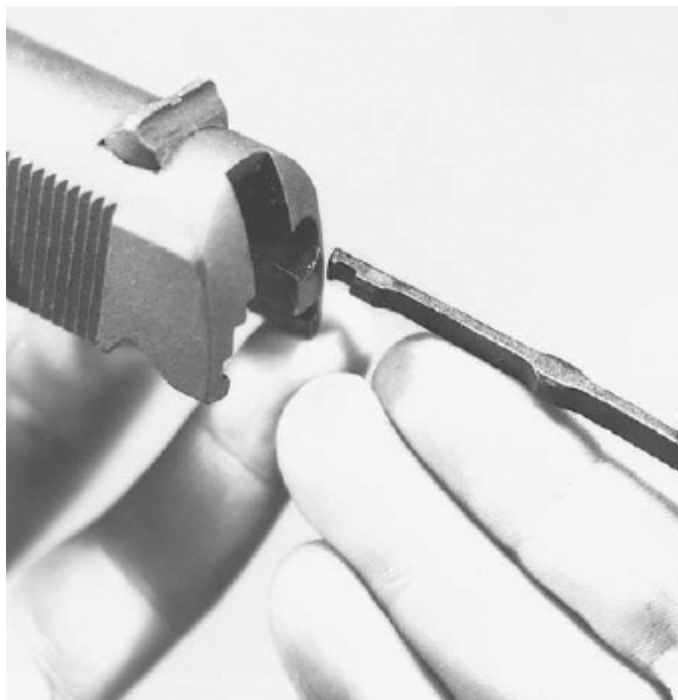
- 10.** With a tool of appropriate size, depress the firing pin and slide the retainer downward to free the firing pin. **CAUTION:** *The firing pin spring is under some compression, and can eject the firing pin with force when the retainer is removed.*



- 11.** After the retainer plate is removed, the firing pin and its return spring can be taken out.



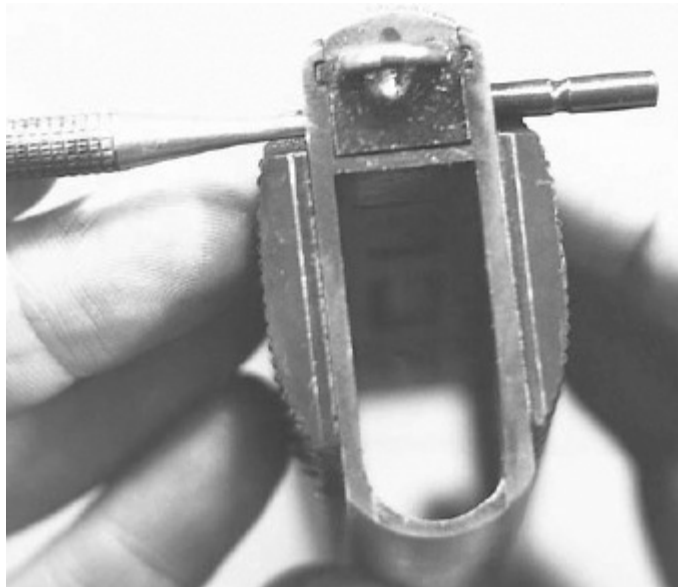
- 12.** Removal of the firing pin retainer plate also frees the extractor. With a small screwdriver pry it gently out, straight to the rear of the slide.



- 13.** When the extractor is pried out past its round headpiece, it can be easily grasped with the fingers and removed from the slide. The rear sight can be drifted out of its dovetail slot from left to right.



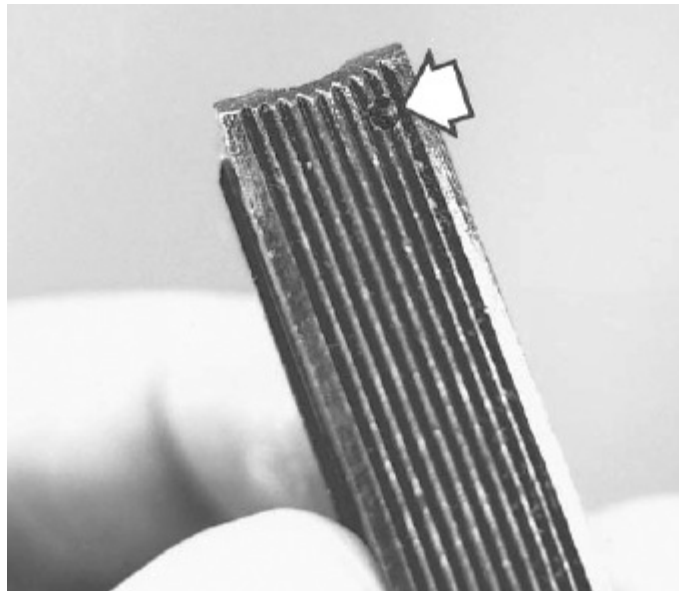
- 14.** The initial takedown key for the frame is the mainspring housing retaining pin, located at the lower rear edge of the grip frame.



- 15.** With the hammer at rest, use a drift of the proper size to drive out the mainspring housing retainer pin.



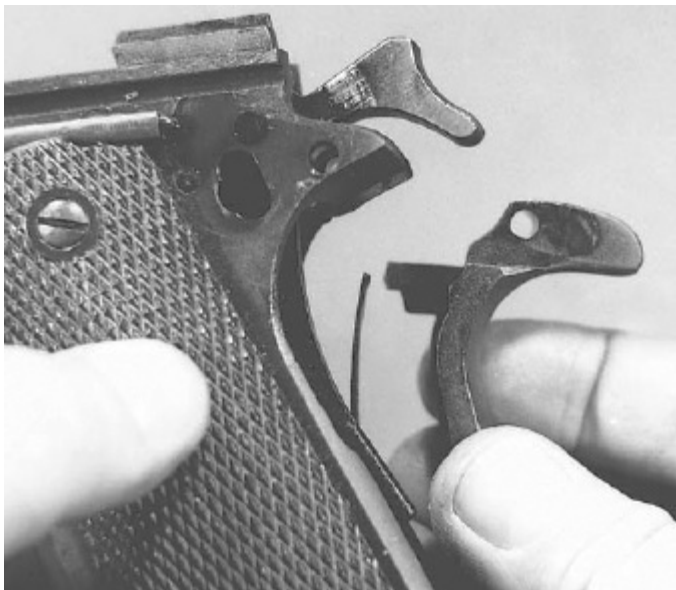
- 16.** The mainspring housing can now be slid down off the frame. If it is tight, cocking the hammer will put pressure on it through the mainspring and help to ease it out.



- 17.** Viewing the mainspring housing from the rear, there is a small pin (arrow) at upper right which can be drifted out toward the inside to free the mainspring and its plunger. **CAUTION:** *The mainspring is under quite a bit of tension and can cause injury when released. Use a heavy shop cloth to catch it when driving out the pin.*



- 18.** With the hammer cocked, move the safety almost to the on-safe position while exerting slight outward pressure toward the left. When its internal projection aligns with its cut in the frame, it can easily be taken out.



- 19.** Removal of the safety frees the grip safety and this is now removed to the rear.



- 20.** The combination leaf spring which powers the sear, trigger, disconnecter, and grip safety can now be lifted out at the rear of the grip frame.



- 21.** Pushed from the front with a drift of proper size, the spring and plungers which supply tension to the slide stop and manual safety can now be removed from the rear of its tunnel above the left grip. The spring tunnel is riveted in place inside the magazine

well and it is difficult to remove and replace without special tools. Unless removal is absolutely necessary, it should be left in place.



22. Started from the right with a drift of the proper size, the hammer pin is removed from the left side of the grip frame.



23. The hammer can now be lifted out of the frame.



- 24.** Removal of the small pin at lower rear of the hammer will free the hammer strut. Note the direction of its curve, and replace it in the same position.



- 25.** Starting from the right side with a drift, remove the sear/disconnector pin from the left side.



26. The sear and disconnect can now be removed from the rear of the frame. Note their relationship for proper reassembly.



- 27.** With a small screwdriver, turn the slotted head of the magazine release retainer to the left, while keeping the magazine release depressed to the level shown.



- 28.** With the retainer locked into its slot in the magazine release, the release can be taken out toward the right side of the gun. After removal, turning the retainer back to the right will free the retainer and its spring from the release body. These are small parts, so take care that they aren't lost.



29. After the magazine release is taken out, the trigger is free to be removed toward the rear of the frame. The grip screws can be taken out to free the grips.

Reassembly Tips:

When installing the combination spring, slide the mainspring housing partially into the frame to hold the spring in place while replacing the grip safety.

During reassembly, the most difficult operation is often the alignment of the barrel link with the slide latch hole in the frame. The hole is large enough that the proper alignment can be seen, and the link can be edged into position by moving the slide back and forth a very

small distance until it drops into place. Don't try aligning the link and the clearance cut for the top of the latch at the same time. Get the latch shaft through the link, then swing the latch up and align it with the clearance cut.

Colt Pony

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Colt Pony also apply to the following gun:

Colt Pony Pocketlite



Data: Colt Pony Series 90

Origin: United States

Manufacturer: Colt's Manufacturing
Company, LLC
Hartford, Connecticut

Cartridge: 380 ACP

Magazine capacity: 6 rounds

Overall length: 5¹/₂ inches

Height: 4 inches

Barrel length: 2³/₄ inches

Weight: 19 ounces

A neat double action version of the Colt Mustang, the Pony was introduced in 1997. Also offered in a 13-ounce aluminum-frame model, the Pony Pocketlite. It is mechanically identical, and the instructions will apply.

Field Strip:



1. With the magazine removed, move the slide rearward until the semi-circular cut in its lower edge is aligned with the retaining tab of the slide latch. Remove the slide latch toward the left.



2. Move the slide and barrel assembly off the frame toward the front.



3. Keeping the spring under control, lift the rear flange of the recoil spring guide away from the front of the barrel underlug, and take out the recoil spring assembly. If this unit is disassembled, note that there are two concentric springs and a washer at the rear.

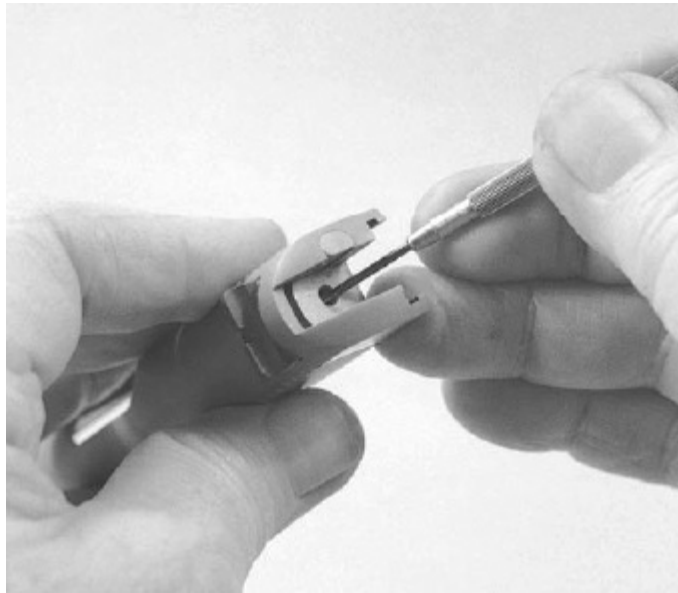


4. Move the barrel slightly forward to clear the extractor, tilt it outward, move it back against the breech face, and remove it from the slide.



Colt Pony field-stripped

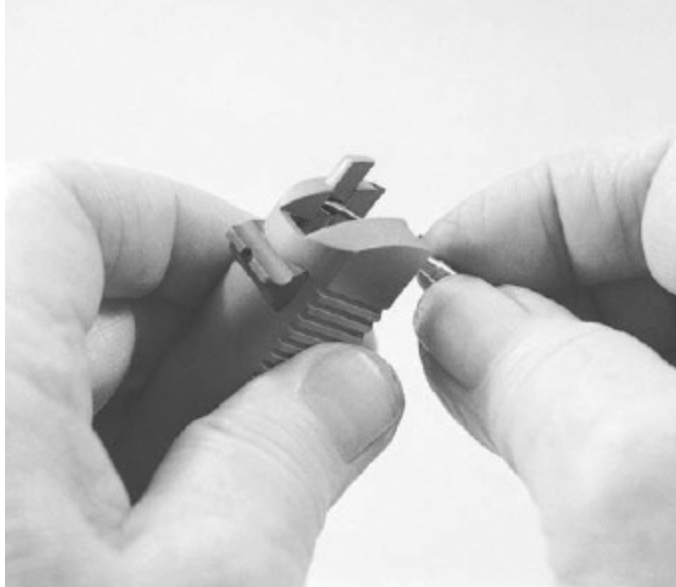
Detail Strip:



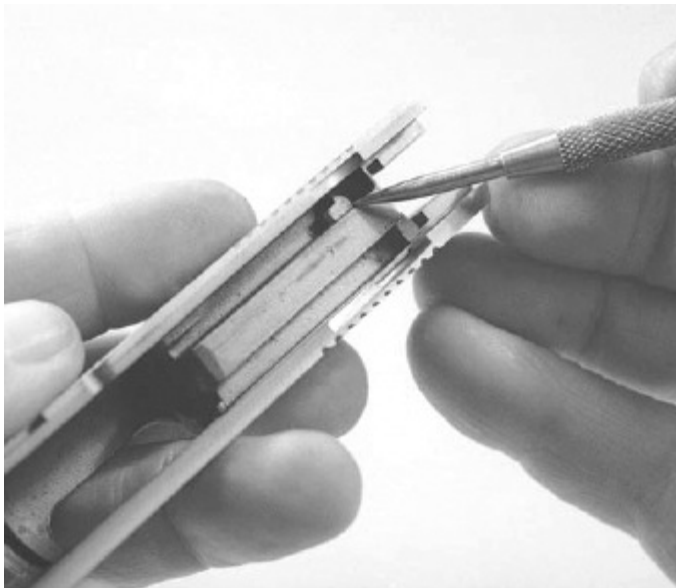
5. Use a tool to push the firing pin forward, and move the retaining plate downward. **CAUTION:** *The firing pin and its spring will be released as the plate clears.*



6. Remove the firing pin and its return spring.



7. Use a tool to nudge the extractor rearward until it can be grasped, and remove it.



8. Drifting the rear sight out of its dovetail toward the right will allow removal of the firing pin lock and its spring upward.
CAUTION: *As the sight clears, the spring will be released, so control it.*



- 9.** Fully depress the magazine catch, and use a small screwdriver to turn the retainer counter-clockwise until it stops.



- 10.** Remove the magazine catch assembly toward the right. Turning the retainer out of its notch will allow removal of the retainer and the spring. **CAUTION:** *Control the spring.*



- 11.** Use a small Allen wrench to take out the grip screws, and remove the grip panels. Disengage the combination trigger and trigger bar spring at the front, and remove it.



- 12.** Drift out the trigger cross-pin.



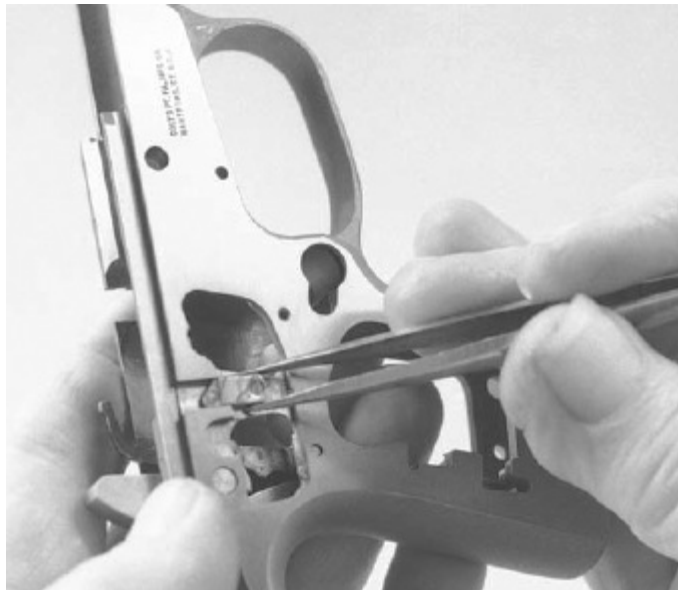
13. Move the trigger slightly downward, and remove the trigger spacer.



14. Tip the trigger outward toward the right, and remove it.



15. Tip the trigger bar outward at the rear, and remove it.



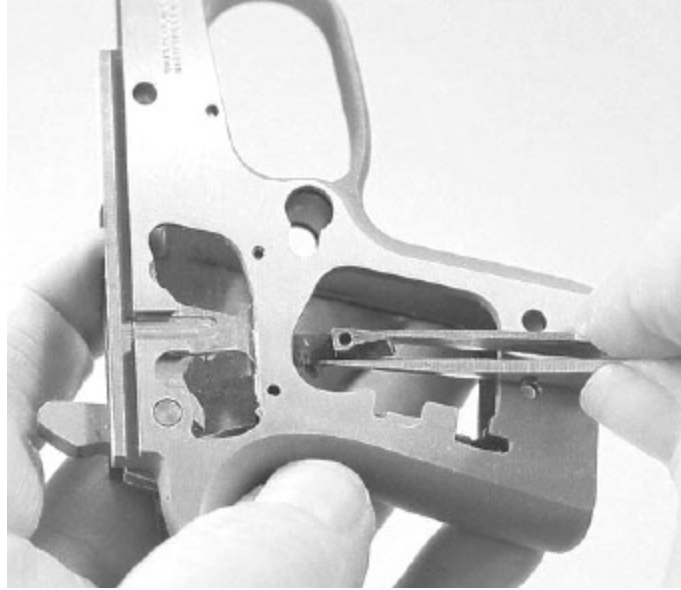
16. Move the disconnect downward and remove it.



17. With the fingertip inside the magazine well to restrain the parts, push out the sear and ejector cross-pin toward the left.



18. Remove the ejector.



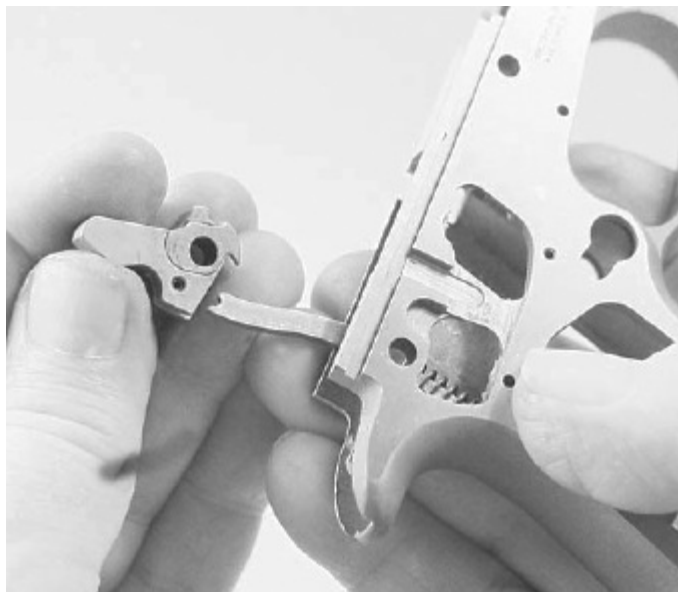
19. Remove the sear.



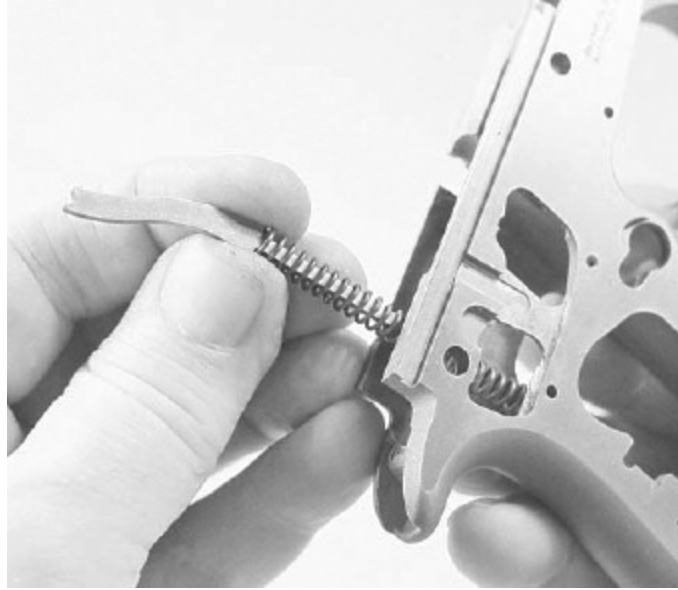
20. Tilt the combination sear and ejector spring forward into the magazine well until the spring clip at its lower end will clear the shoulders in the frame, and move it forward and upward to take it out. Do not remove the clip from the spring.



- 21.** Restrain the hammer, and push out the hammer pivot pin.
CAUTION: *Keep a firm grip on the hammer, as the tension of the hammer spring will be released as the cross-pin clears.* If the strut slips off its bearing pin at the rear of the hammer, it can go quite a distance, or cause injury.



- 22.** Ease the tension slowly, and remove the hammer. The plate on the right side of the hammer and the strut cross-pin are not removed in normal takedown.



23. Remove the hammer strut and spring.



24. If necessary for repair, the slide latch spring can be pried gently out of its recess for removal.

Reassembly Tips:



1. As the hammer is being re-installed, a temporary reinsertion of the magazine will help in keeping the spring aligned as the hammer is moved into place for insertion of the cross-pin.

CAUTION: *Take care that the strut does not slip off its bearing pin during this operation.*



2. As the combination sear and ejector spring is being re-installed, use a tool in the hole at its lower end to guide it into place.



3. When installing the ejector and the sear, remember that the arms of the spring go behind both parts. Put the ejector in first. As the sear is being positioned, keep the hammer pushed very slightly toward the rear, so it won't bear on the sear.



4. As the slide is moved back onto the frame, you must push the disconnecter down beneath the slide at the rear.

Coonan Model B

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Coonan Model B also apply to the following gun:

Coonan Model A



Data: Coonan Model B

Origin: United States

Manufacturer: Coonan Arms,
St. Paul, Minnesota

Cartridge: 357 Magnum

Magazine capacity: 7 rounds

Overall length: 8.3 inches

Height: 5.6 inches

Barrel length: 5 inches

Weight: 42 ounces

There was an earlier Coonan 357 Magnum automatic, but it was produced in very small quantity. Mechanically, the Model A is virtually the same as the later Model B, the one shown here, and the instructions will apply. The Coonan pistol is generally based on the old Colt Government Model pattern, but there are several unique points that are different. It is a beautifully-made gun, and one of the few automatic pistols chambered for the 357 magnum revolver cartridge.

Field Strip:



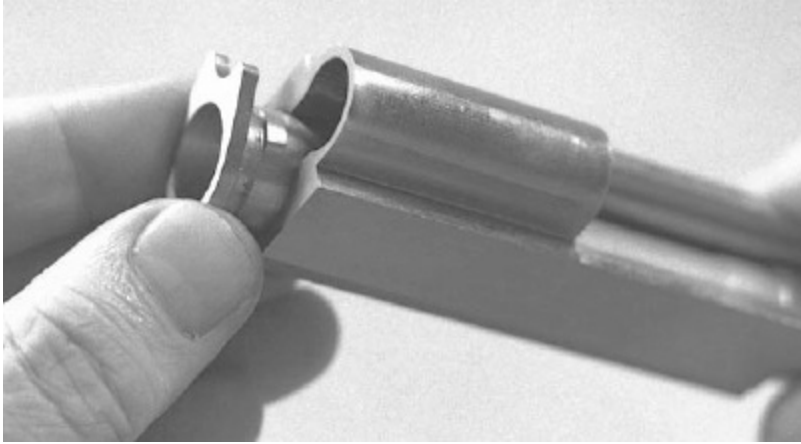
1. With the magazine removed and the hammer at rest, depress the recoil spring plunger and turn the muzzle bushing clockwise (front view) until it stops. **CAUTION:** *The recoil spring is under tension, and it is powerful. Control the plunger, and ease it out.*



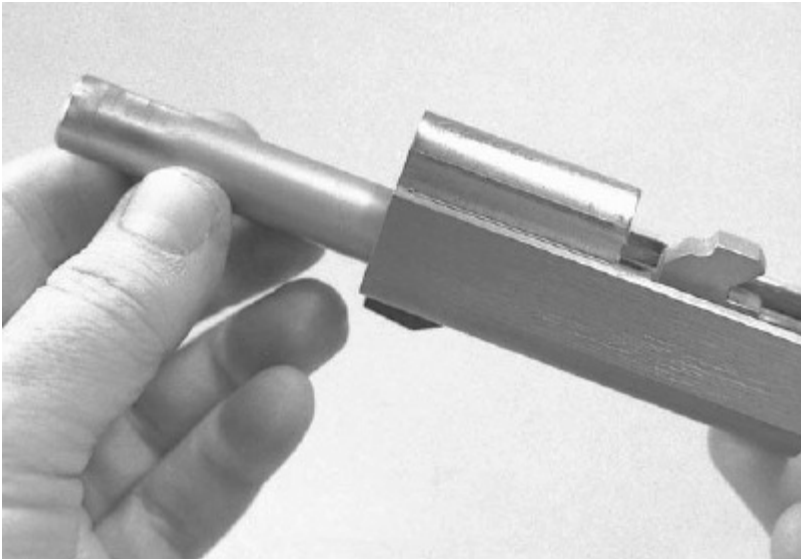
- 2.** Cock the hammer, and move the slide back until the semi-circular cut in its lower edge aligns with the retaining tab on the slide-latch. Remove the slide-latch toward the left.



- 3.** Remove the slide assembly toward the front. The recoil spring and its plunger and guide are then taken off the underside of the slide.



4. Turn the muzzle bushing counterclockwise until it stops, and remove it toward the front.

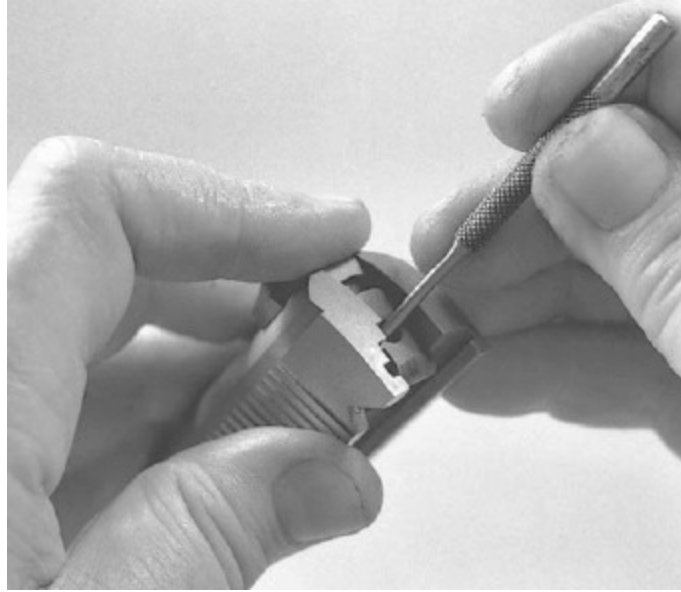


5. Move the barrel downward to disengage the locking lugs, and remove it toward the front. **Gun is now field-stripped.**

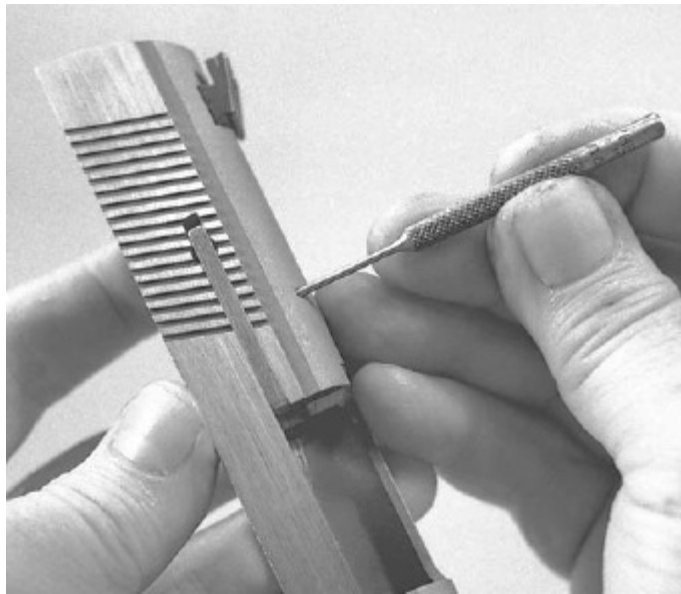


Coonan Model B field-stripped

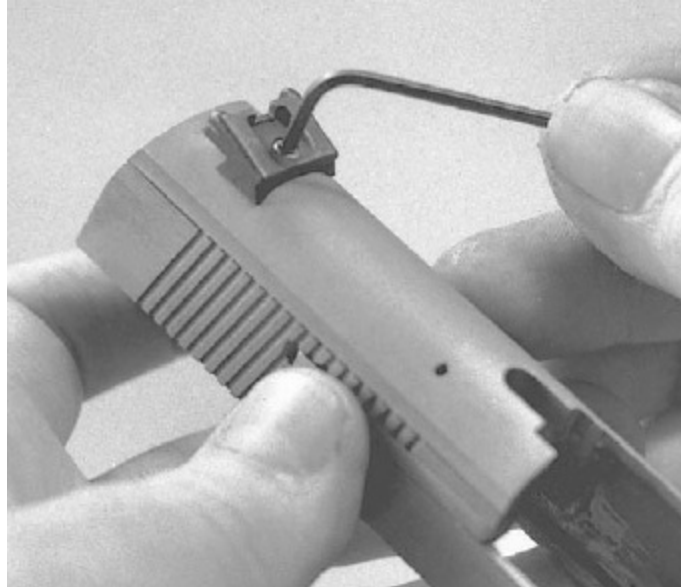
Detail Strip:



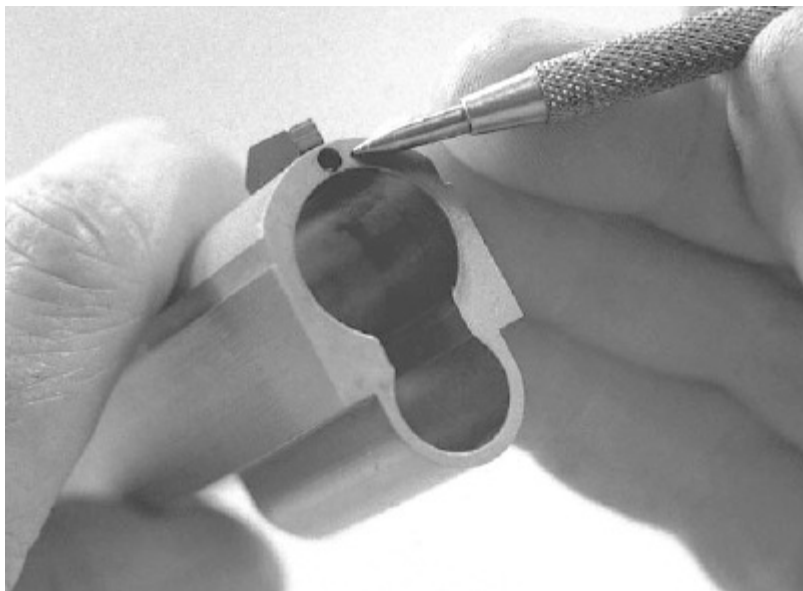
6. Depress the firing pin head with a suitable tool, slide the retaining plate downward, and remove the firing pin and its spring toward the rear. **CAUTION:** *The spring is under tension, so restrain the firing pin and ease it out.*



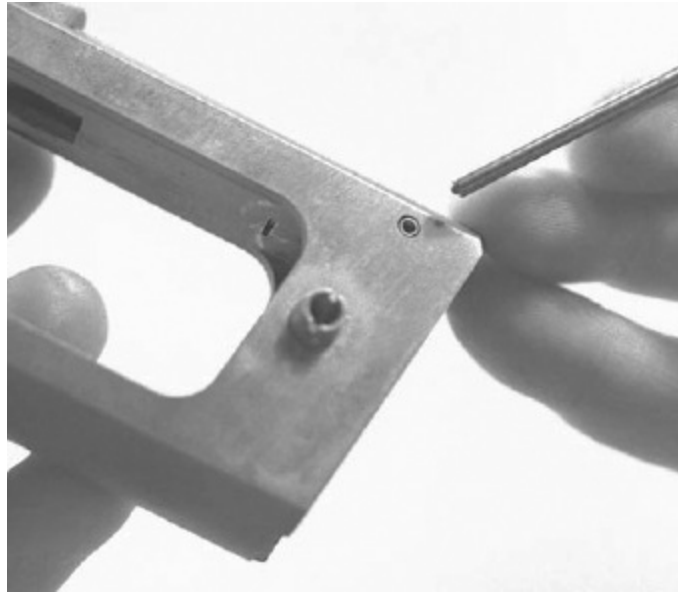
7. The extractor is pivoted and retained on the right side of the slide by a vertical pin. The pin is driven out downward, and the extractor and its spring are taken off toward the right.



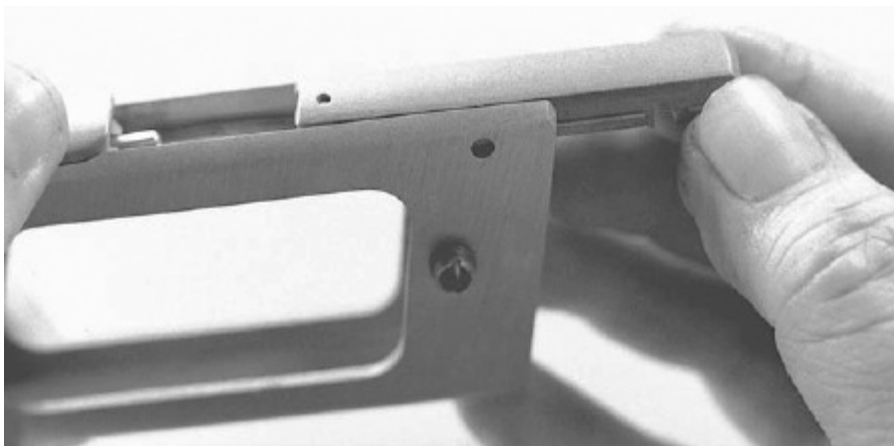
- 8.** Using an Allen wrench supplied with the gun, or one of the proper size, loosen the screw in the top of the rear sight, and slide it off toward the right.



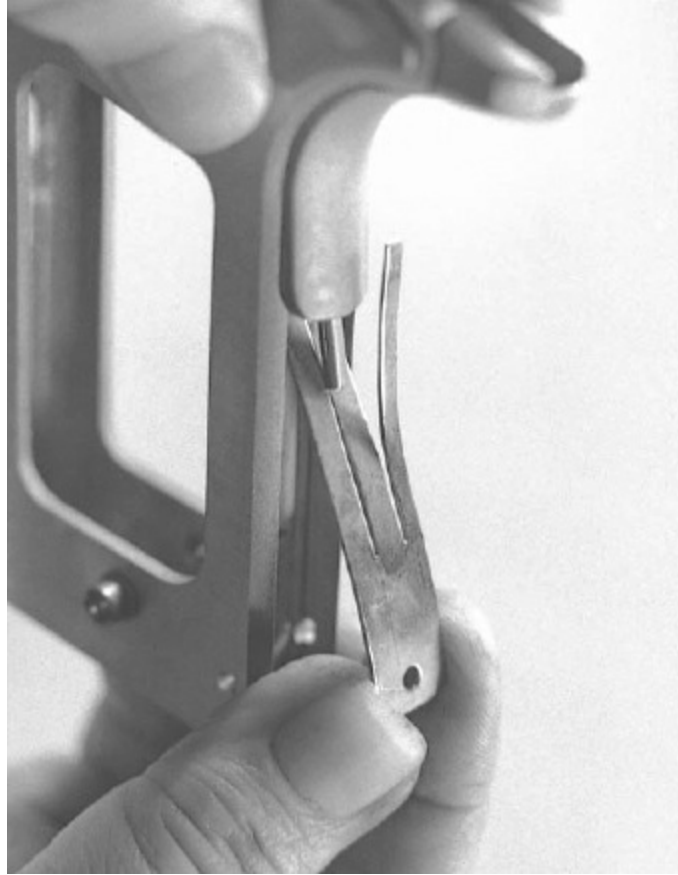
- 9.** The front sight is also retained by an Allen screw, this one requiring a small wrench. After the screw is backed out, the sight is taken off upward.



- 10.** The mainspring housing is retained in a manner that is similar to the system in the old Government Model pistol, but it has a smaller cross-pin with no spring detent. The best tool to use in pushing it out is a roll pin punch of the proper diameter. Be sure the hammer is at rest (lowered) before the pin is pushed out.



- 11.** After the pin is removed, slide the mainspring housing downward out of the frame. The hammer spring and its plunger are retained in the housing by a small pin near the top. With the housing on a firm surface, depress the plunger with a tool and push the pin inward for removal. **CAUTION:** *The strong spring is under tension. Ease the plunger out.*



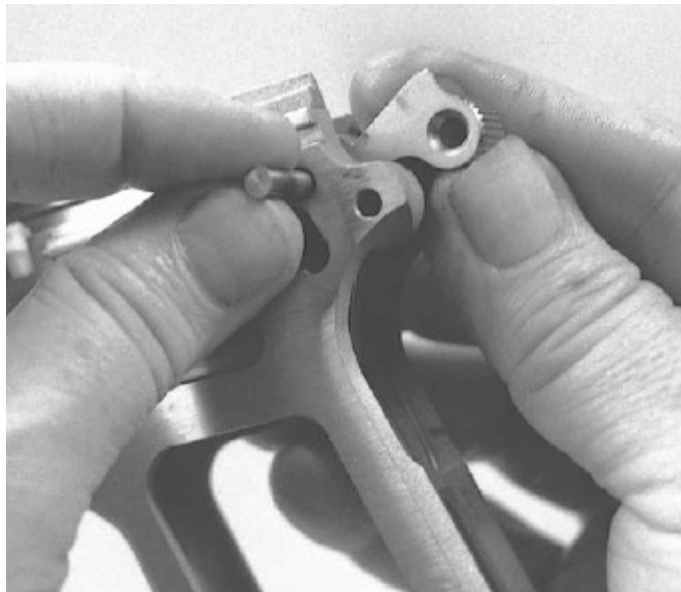
- 12.** The sear, disconnector and grip safety combination spring will be freed by removal of the mainspring housing, and can be taken out at this time.



- 13.** Cock the hammer, and move the safety toward its upper position while pushing its shaft toward the left. Remove the safety to the left.



14. The grip safety is now removed toward the rear.



15. Push the hammer pivot out toward the left, and remove the hammer from the frame. The hammer strut is pivoted and retained by a cross-pin in the hammer. If removal is not necessary, this pin is best left in place.



- 18.** The trigger stirrup can now be slid straight out toward the rear for removal.



- 19.** The trigger is pivoted and retained by a small cross-pin which is driven out toward the left. The trigger is then removed through the guard opening.

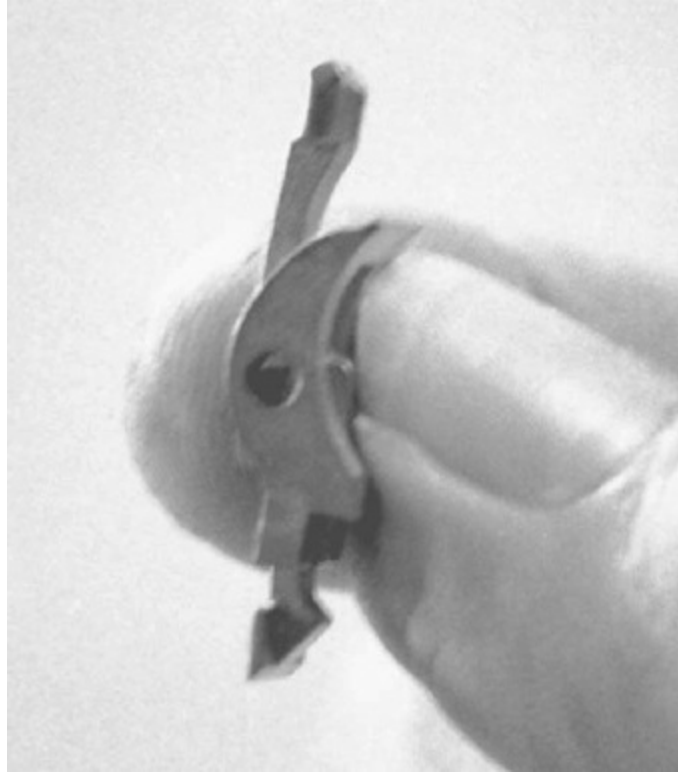


- 20.** The combination slide-latch and safety plunger system, with its attendant spring, is removed from its housing toward the rear.



- 21.** The ejector is a post-and-stud drive fit in the top of the frame, and it is best left in place unless replacement is necessary. If removal is needed, drive a wedge-shaped tool through the opening at the center of the ejector to lift it.

Reassembly Tips:



1. The sear and disconnect are shown here without their cross-pin, in the proper orientation for insertion in the frame.

When the combination spring has been installed in the frame, slide the mainspring housing part-way into the frame to hold it in place during installation of the safety and grip safety.

As the manual safety is pushed into place, it will be necessary to use a small tool to depress the safety detent plunger. When sliding the mainspring housing fully into the frame, be sure the tail of the hammer strut is properly aligned with the plunger in the top of the housing.

CZ 27

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the CZ 27 also apply to the following guns:

CZ Model 1922

CZ Model 1924



Data: CZ Model 27

Origin: Czechoslovakia

Manufacturer: Ceska Zbrojovka,
Prague

Cartridge: 32 ACP

Magazine capacity: 8 rounds

Overall length: $6\frac{1}{4}$ inches

Height: $4\frac{7}{8}$ inches

Barrel length: $3\frac{7}{8}$ inches

Weight: 25 ounces

The Czech government had earlier adopted a design by Josef Nickl of Mauser to be their military pistol, and the Model 27 is a further simplification of this design, eliminating the turning-barrel locking system of the earlier guns. Other than this point, the instructions which follow will also apply to the Model 1922 and Model 1924 pistols, with some small variations. The Model 27 is a well-designed gun, and the pre-Nazi-occupation pieces are of the highest quality. Some of the late war-time pistols are fairly rough, but still work well, a tribute to the excellence of the design.

Field Strip:



1. Leave the magazine in the gun and pull back the slide until it locks open. The release button for the takedown-latch is located on the right side of the frame, just forward of the trigger.



- 2.** While depressing the release button, slide the takedown-latch on the left side down.



3. Withdraw the takedown-latch to the left and remove it from the frame.



4. Holding the slide against the tension of the recoil spring, remove the magazine and run the slide assembly forward off the frame.



5. Remove the recoil spring, its guide rod, and the barrel retainer from the underside of the slide.



6. Turn the barrel bushing slightly to the left, until a groove on its top aligns with a groove in the slide edge, and remove the bushing toward the front.

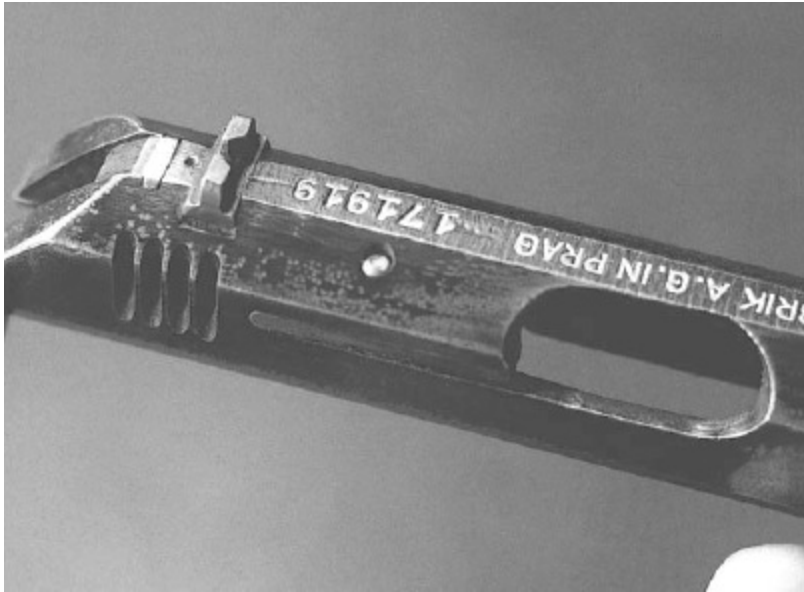


7. Move the barrel toward the front of the slide until its retaining lugs align with a recess in the left inner wall of the slide. Turn the barrel completely over until it stops then withdraw it from the front of the slide. **Gun is now field-stripped.**



CZ 27 field-stripped

Detail Strip:



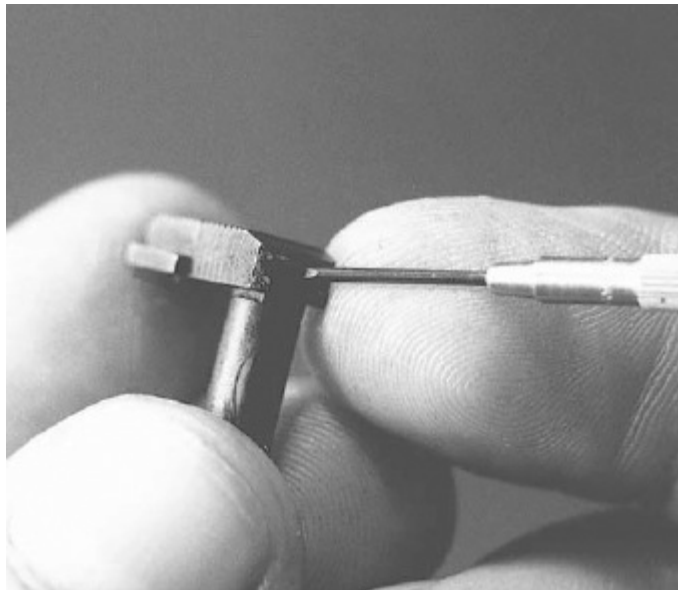
8. The extractor and its spring are retained by a vertical pin which must be driven out toward the top of the slide. Only half of the pin is accessible on the underside of the slide, so a very slim drift punch must be used.



9. Depress the firing pin and lift the firing pin retainer from its T-slot in the slide. **CAUTION:** *The firing pin spring is under tension and can exit with some force. Ease it out, or catch it in a shop cloth.*



10. Remove the firing pin and its spring from the slide at the rear.



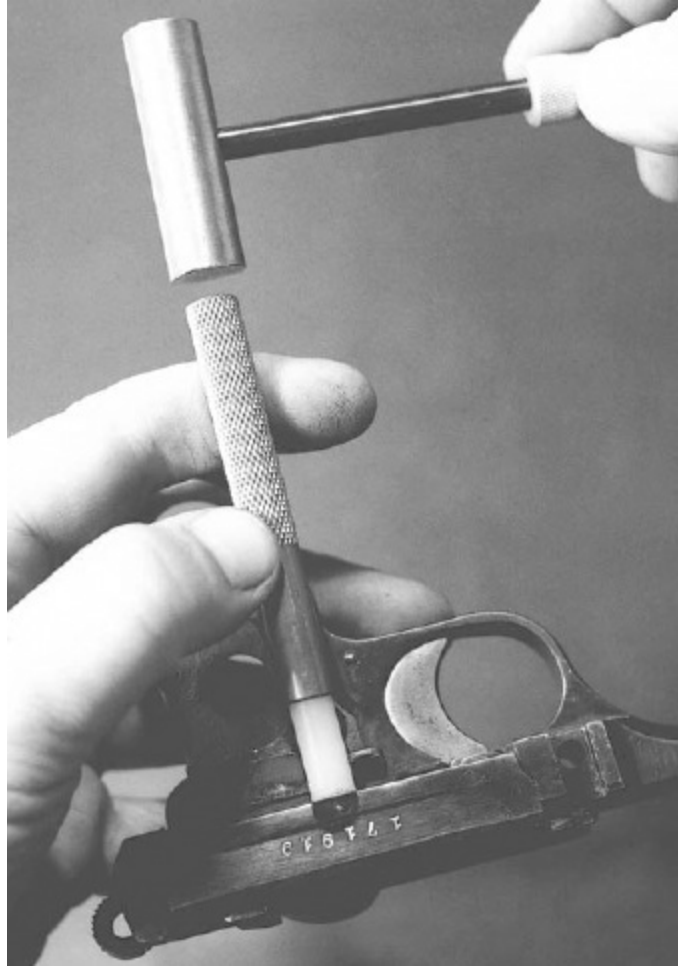
11. The takedown-latch can be dismantled by using a small tool to depress its spring, housed in the hollow release button, and sliding the button out of its T-slot.



12. After the grip screws are removed, the one-piece grip is slid straight off toward the rear.



- 13.** On earlier guns, the sideplate is secured by a small screw near its lower edge. It is not necessary to remove the screw—just back it out far enough to free the plate.



- 14.** After the screw is backed out, the plate can be moved upward. If it is unusually tight, a nylon punch and a light hammer may be necessary to free it. Remove the sideplate from the frame.



- 15.** Move the rear of the safety-lever outward, then move it forward to disengage its front hook from the frame and take it off.



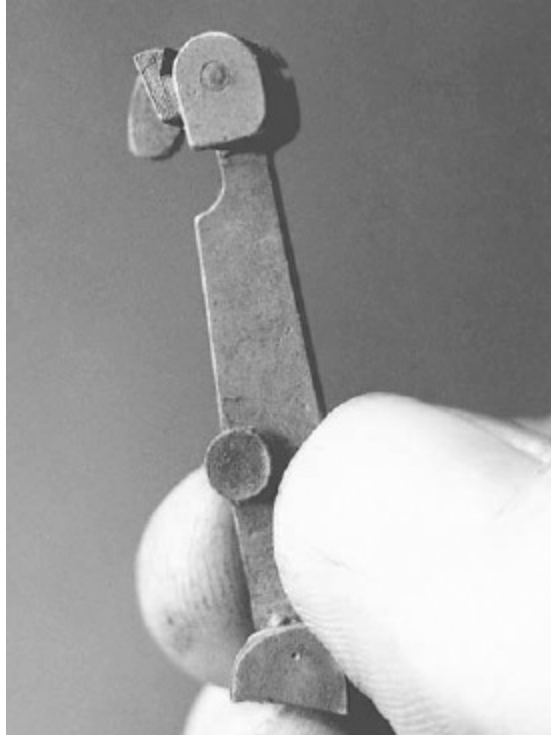
- 16.** Lift the upper end of the safety release button and move it toward the top of the frame and off.



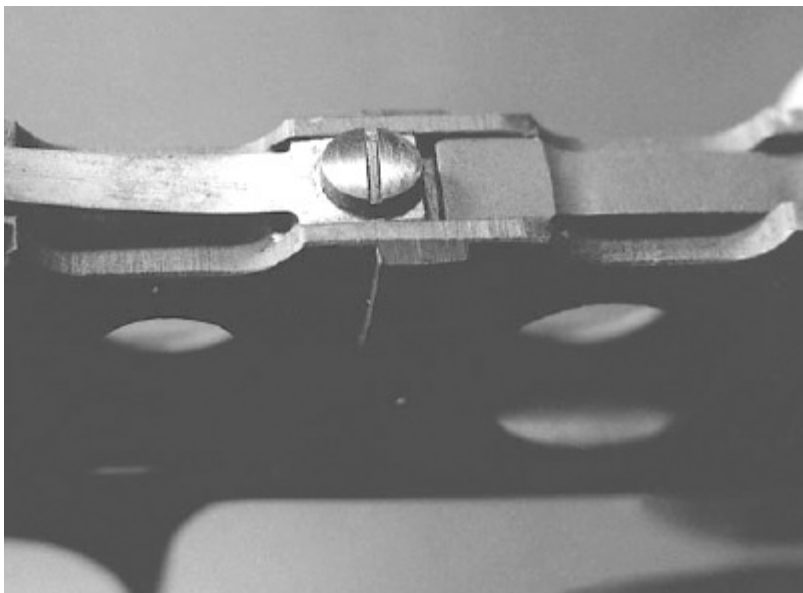
17. Remove the sear and safety spring from the frame.



18. With the hammer at rest, lift the combination sear and trigger bar off toward the left.



- 19.** The disconnector and its spring are mounted in the forward end of the sear/trigger bar. Driving out the cross-pin will release the disconnector and spring, but this pin is usually fitted tightly, so take care that the wings at the end of the bar are not broken.



- 20.** The hammer spring and the magazine catch, which is its own

spring, are dovetail-mounted at the rear of the backstrap. The hammer spring is also secured by a screw.



- 21.** To remove the magazine catch, insert a large screwdriver against its forward hook, spring it back just enough for its side wings to clear their recesses in the backstrap, and lever it downward and off the frame.



- 22.** Depress the mainspring by inserting a tool between its upper end and the frame, and move the hammer toward the left for removal. Take out the hammer spring screw. Use a brass or nylon drift to tap the spring up and out of its dovetail for removal.

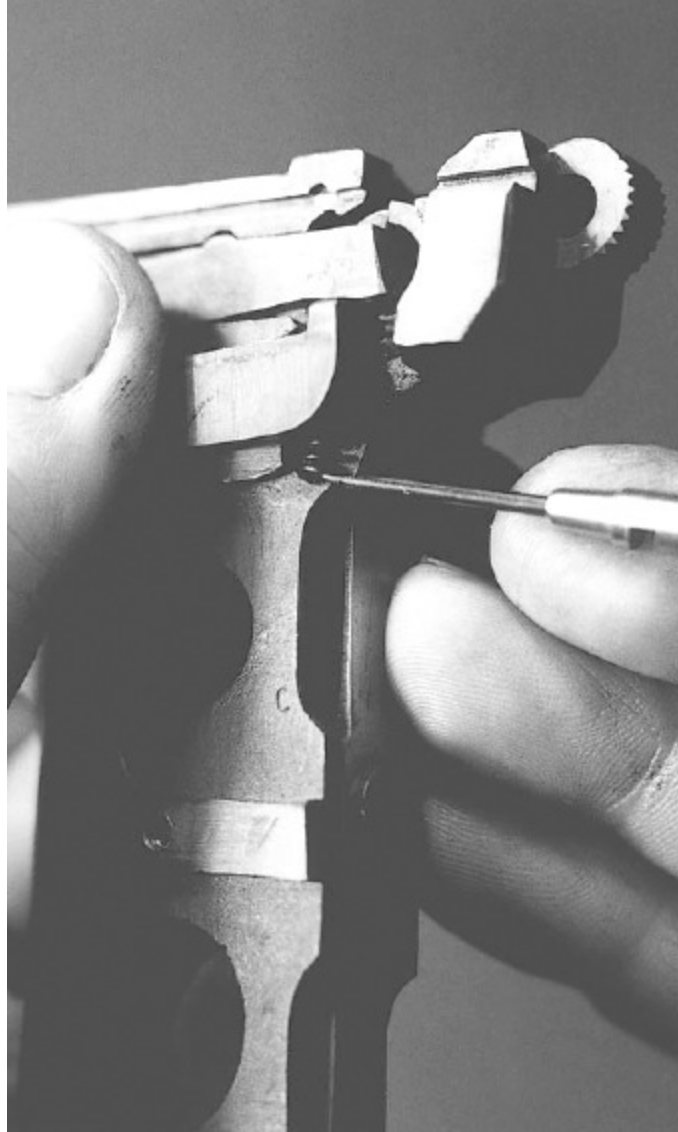


- 23.** Removal of the trigger bar/sear will allow the trigger to pivot forward beyond its usual position. It is easily removed toward the left, along with its spring.

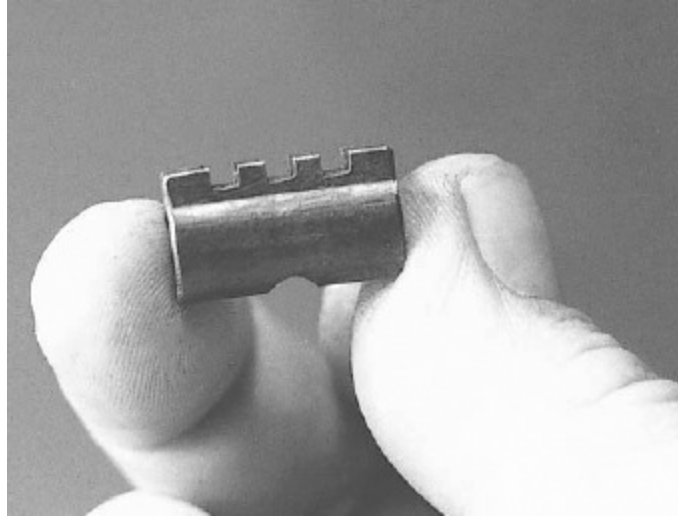


24. The cross-pin at the lower rear of the trigger guard retains the magazine safety. The cross-pin at the top edge of the frame holds the combination ejector and hammer stop block.

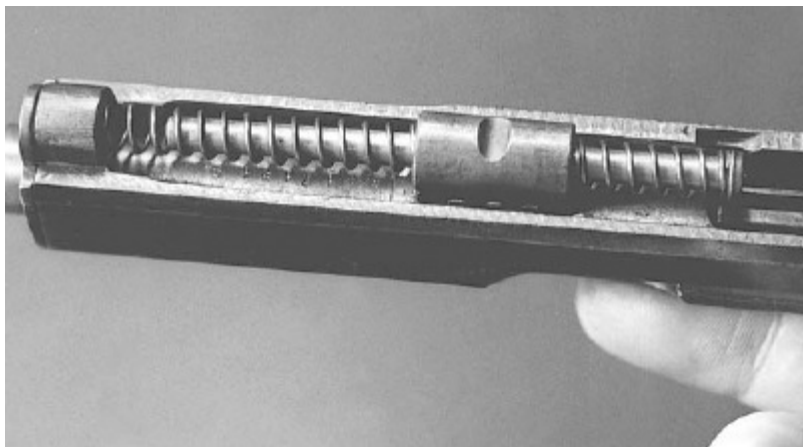
Reassembly Tips:



1. When replacing the safety-lever on the frame, use a small screwdriver to lift the lower end of the sear/safety spring, compressing it to slip onto its shelf inside the safety-lever.



2. The barrel retainer is equilaterally designed, and can be installed with either end forward.



3. Just before the slide assembly is reinstalled on the frame, the proper arrangement of the parts should look this way. Be sure the rear end of the recoil spring guide rod enters its hole in the frame, and use the empty magazine to hold the slide open while inserting the takedown-latch. Also, be sure the barrel is all the way to the rear, positioning the barrel retainer groove to mate with the crosspiece of the latch.

CZ 52



Data: CZ Model 52

Origin: Czechoslovakia

Manufacturer: Ceska Zbrojovka,
Strakonice

Cartridge: 7.62 x 25mm Tokarev

Magazine capacity: 8 rounds

Overall length: 8¹/₄ inches

Height: 5¹/₂ inches

Barrel length: 4³/₄ inches

Weight: 37.5 ounces

Designed by Jan and Jaroslav Kratchovil, the Czech Model 52 was adopted for military service in 1952. In recent times, the pistol has become a popular item on the surplus market, where it has also been offered converted to fire the 9mm Luger round.

Field Strip:



- 1.** Remove the magazine. Grasp the serrated wings of the takedown latch, and pull the latch downward.



2. When the latch is pulled down, the slide and barrel assembly will move forward, and it can be lifted off the frame.



3. Select a tapered drift that is a snug fit in the hole in the center of the barrel underlug. Move the barrel assembly forward about $\frac{3}{4}$ of an inch, and tilt it outward at the rear for removal. **CAUTION!** *Control the strong recoil spring.*

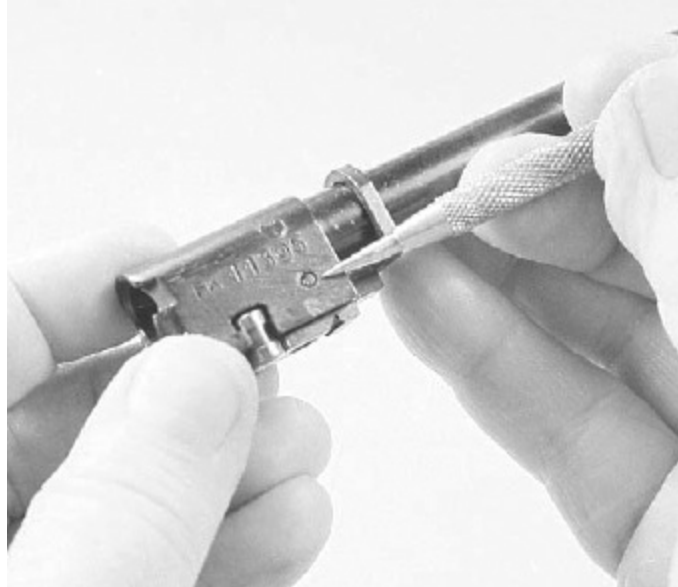


4. Remove the recoil spring from the barrel.

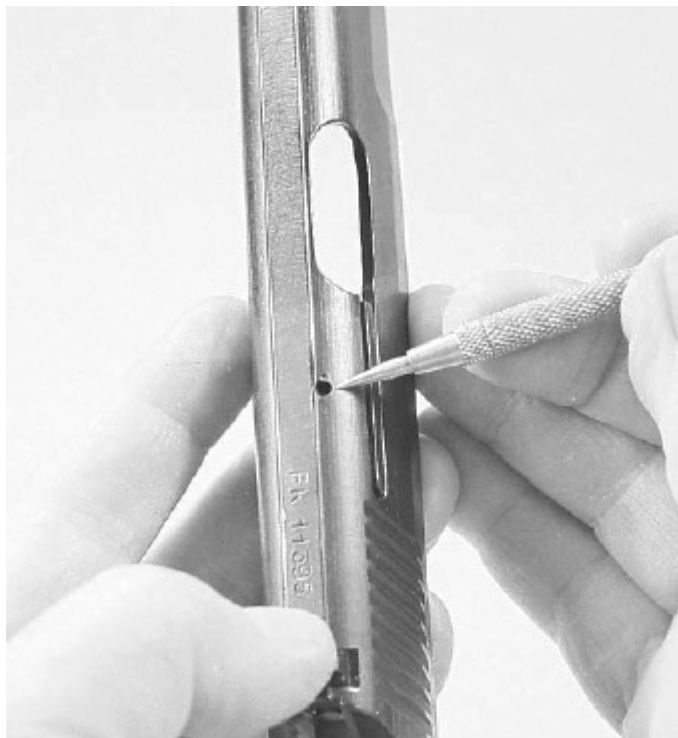


CZ 52 field-stripped

Detail Strip:



5. Drifting out this pin will allow the locking slide to be removed toward the front. The locking rollers can then be moved inward for removal. In normal takedown, this system is best left in place.



6. Drift out the extractor pin upward.



7. Remove the extractor.



8. Remove the extractor spring.



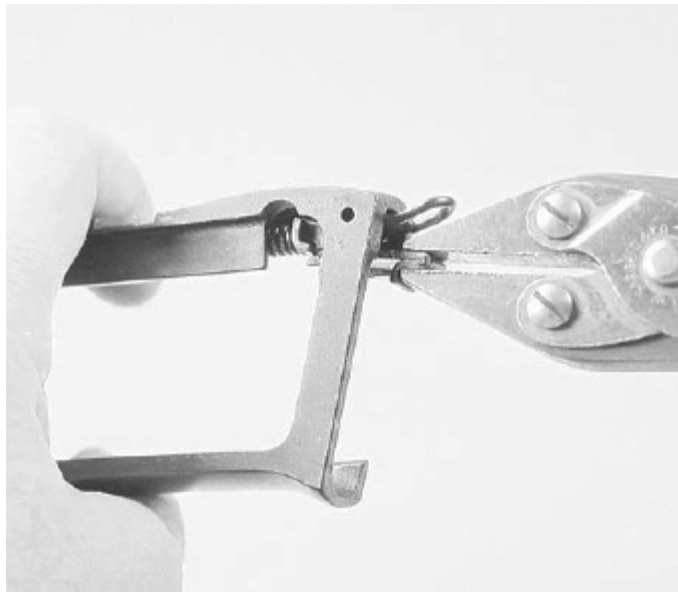
- 9.** Point the slide upward, and depress the firing pin safety block. The firing pin will drop out for removal. There is no firing pin return spring. A camming surface on the safety block performs this function.



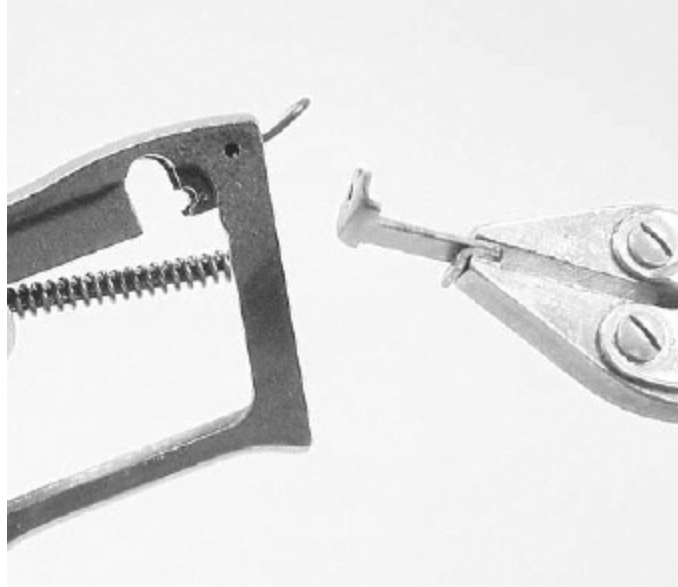
- 10.** Remove the firing pin safety block and its coil spring.



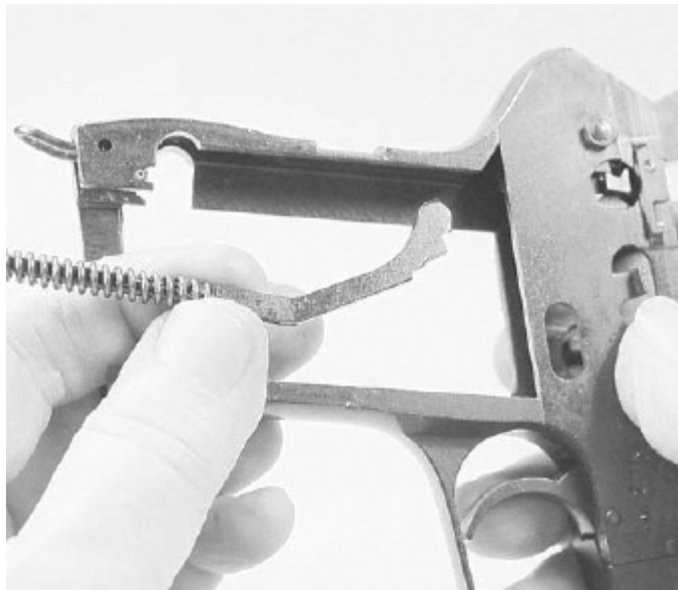
- 11.** Use a sharp tool to lift the grip retaining clip on either side, and insert another tool into the hole at the rear to pull the clip off. Control the clip as it is freed. After the clip is removed, lift off the grip panels.



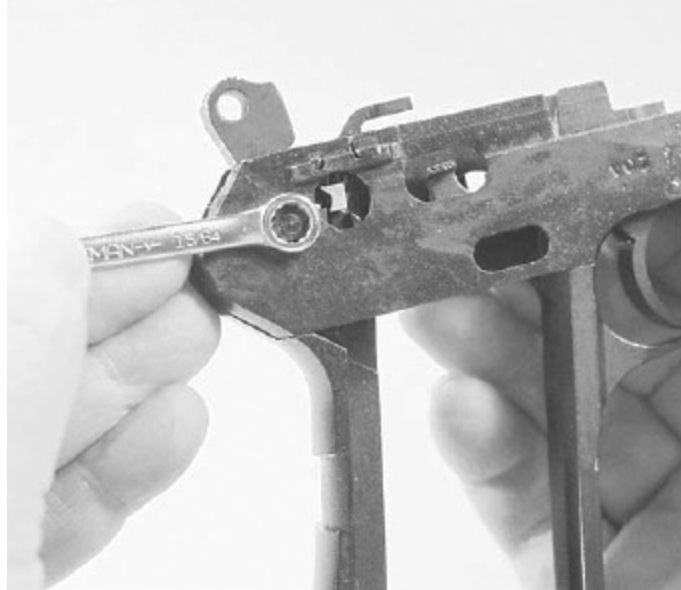
- 12.** Grip the magazine catch with non-marring pliers, push it upward, and swing the unit forward into the magazine well. **CAUTION:** *Control the spring tension.*



13. Remove the magazine catch.



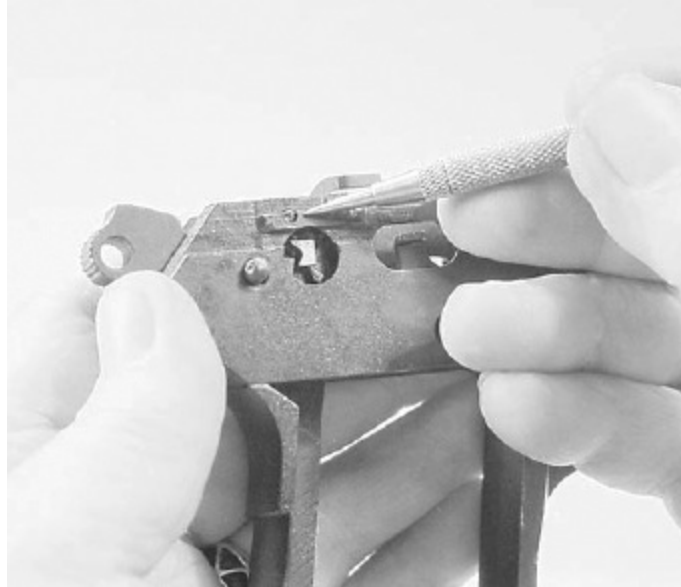
14. Remove the hammer spring and strut.



- 15.** With a wrench of the proper size (15/64 will work), remove the hammer axle nut.



- 16.** Drift the trigger pin about a quarter-inch toward the left.



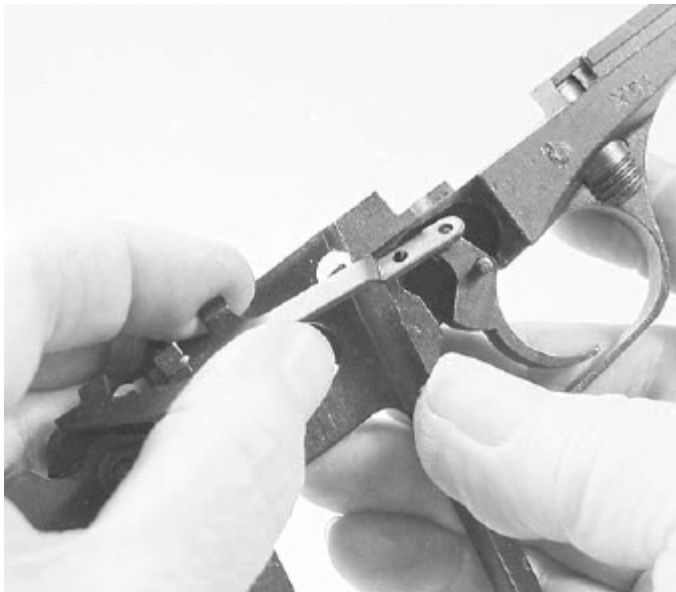
17. Drift the sear cross-pin slightly toward the left.



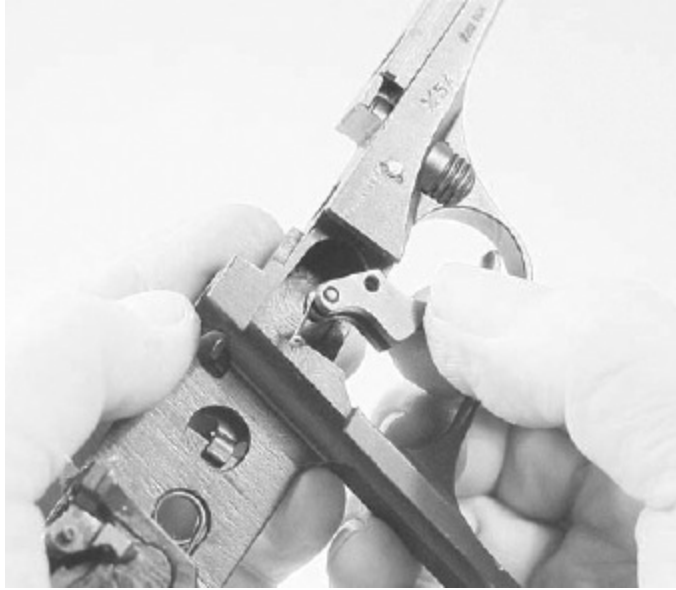
18. With the safety in off-safe position, push the hammer axle slightly toward the left.



19. Lift the side-plate at the rear, and take it off.



20. Unhook the trigger bar from its post on the trigger, and from the spring, by tilting it, and take it off.



- 21.** Remove the trigger assembly toward the right. The trigger and trigger bar spring can be taken off by pushing out its cross-pin.



- 22.** Remove the hammer axle toward the left.



23. Remove the hammer.



24. Push the sear cross-pin back toward the right until it is even with the inside of the sear, and take out the sear, sear spring, and pin toward the right.



25. The ejector can now be removed.



26. Push the safety lever out toward the left, and remove it.



- 27.** Unhook the front arm of the combination spring from the slide latch, and turn the spring to lift the safety cross-piece at the rear out of its recess. Remove the spring toward the left.



- 28.** Drift out the slide latch axle.



29. Remove the slide latch.



30. Restrain the takedown latch, withdraw the drift, and take out the latch and its spring upward.

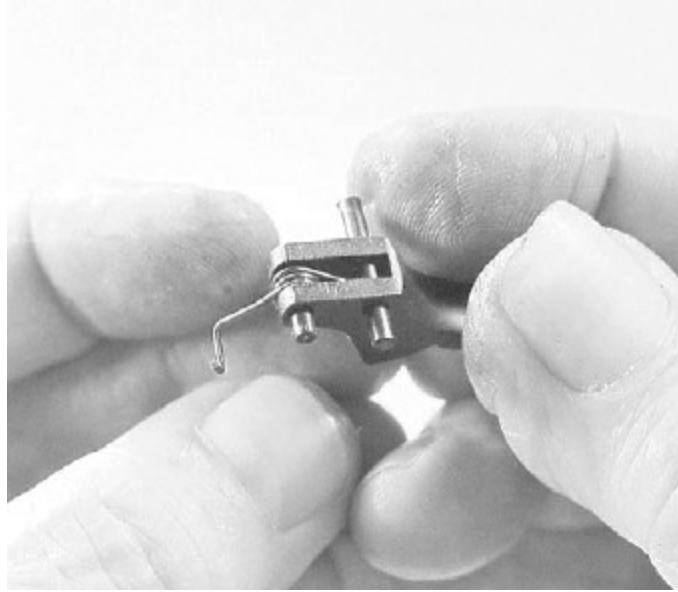


- 31.** If removal is necessary for repair or refinishing, the lanyard loop can be detached by squeezing it slightly to move its upper ends out of holes in the frame.

Reassembly Tips:



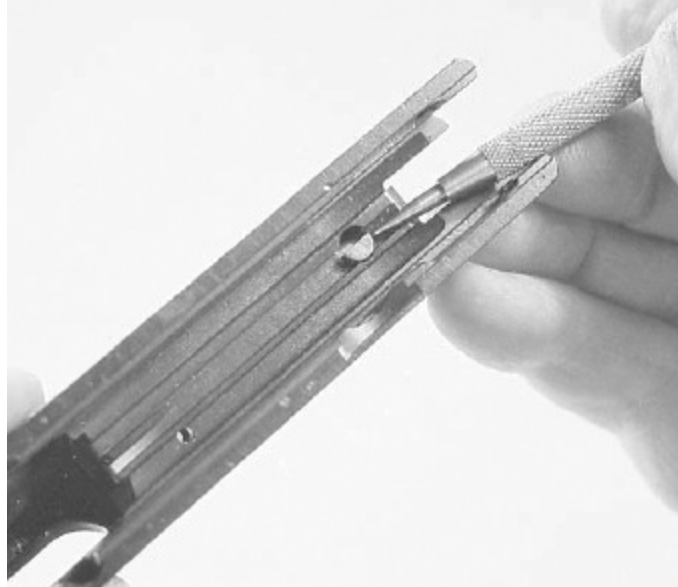
- 1.** When installing the sear assembly, note that the long arm of the spring at the front must bear on the inside of the frame. For convenience, the sear and ejector can be installed as a unit.



- 2.** When installing the trigger, note that the straight lower arm of the spring must go behind the trigger cross-pin.



- 3.** When installing the firing pin, be sure it is in proper orientation for engagement with the safety block.



4. When properly installed, the operation lug of the firing pin safety block will be centered in the slide, as shown here.

Desert Eagle



Data: Desert Eagle

Origin: Israel

Manufacturer: Israel Military Industries,
Ramat-Hasharon, Israel

Cartridge: 357 Magnum,
41 Magnum,
44 Magnum

Magazine capacity: 9 rounds (357)
8 rounds (41, 44)

Overall length: 10¹/₄ inches

Height: 6 inches

Barrel length: 6 inches

Weight: 62 ounces

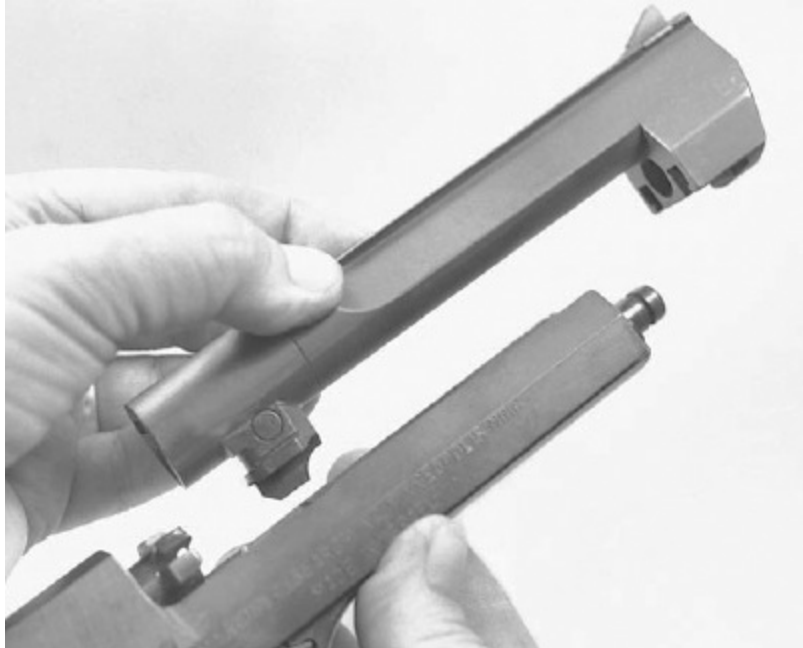
(357, steel frame)

Made in Israel for Magnum Research of Minneapolis, Minnesota, the Desert Eagle is currently available in a wide variety of finishes and frame materials, and with the option of extended barrel lengths. The excellent basic design, though, has been practically unchanged through all of the versions and calibers. There may be slight variations in the shape of some parts, but the instructions can be used for any Desert Eagle pistol.

Field Strip:



1. With the magazine removed, depress the button on the left side at the front of the trigger guard, and turn the lever on the right side down and forward until it stops. The barrel and slide will move slightly forward.



2. Move the barrel forward just enough to clear the front of the bolt, and lift it off upward.



3. Move the slide assembly forward off the frame.

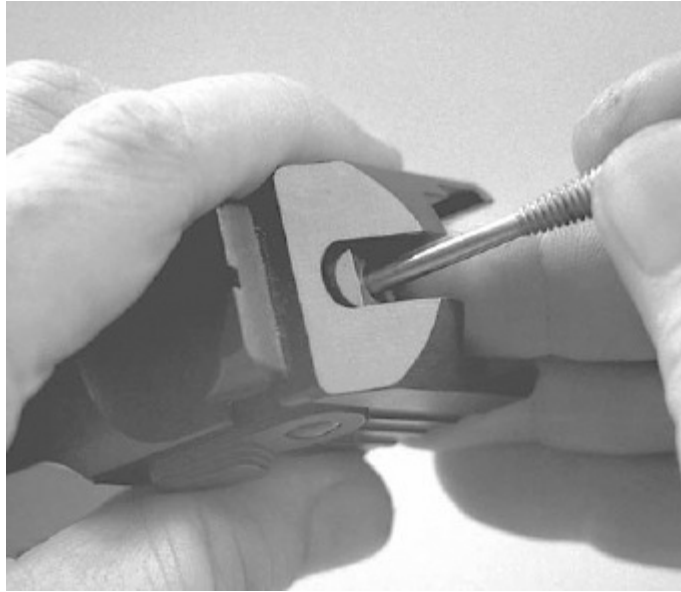


4. Slide the recoil spring assembly forward out of the frame. **Gun is now field-stripped.**

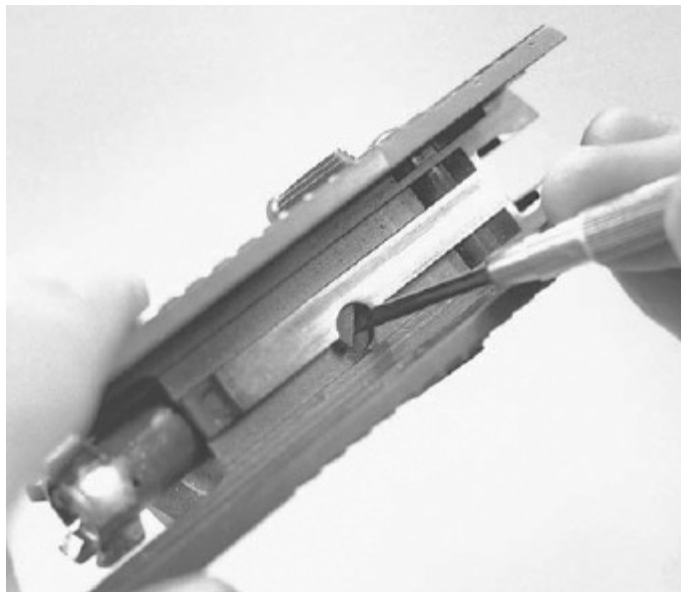


Desert Eagle field-stripped

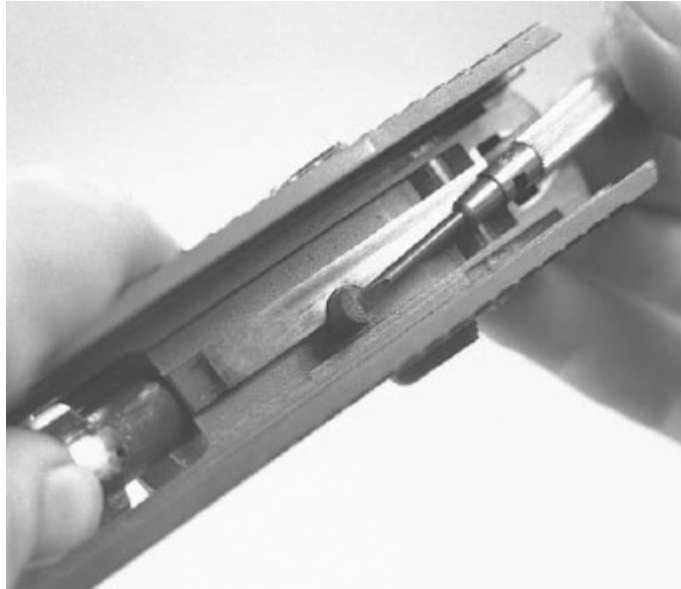
Detail Strip:



5. With the safety in off-safe position, depress the head of the firing pin, and slide the firing pin retaining plate downward.
CAUTION: *The firing pin spring is under tension.* Remove the firing pin and its spring toward the rear.



6. Use a small tool to rotate the bolt stop pin until its flat face is toward the rear.



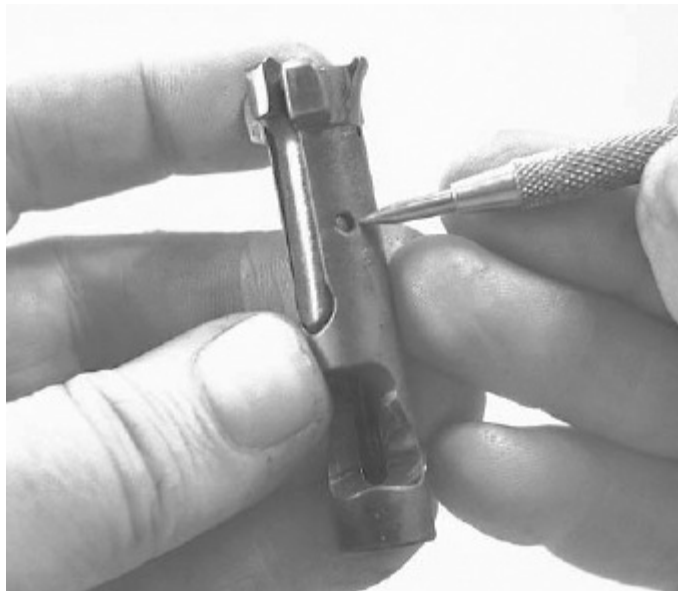
7. Using the notch in the flat face of the bolt stop pin, lift the pin out of its well in the slide. **CAUTION:** *Restrain the bolt assembly while this is done.*



8. Remove the bolt, bolt plunger, and its spring toward the front.



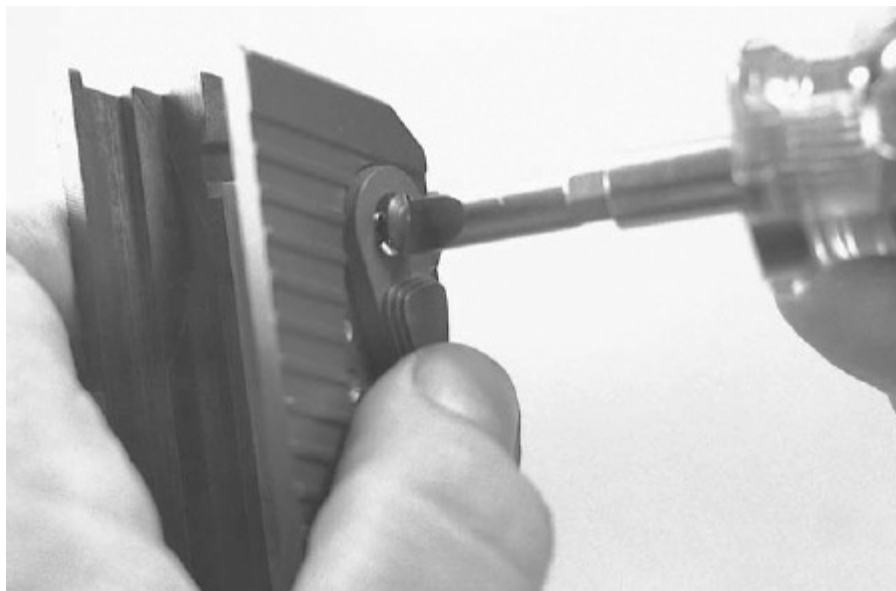
- 9.** The gas piston is retained on the front of the slide by a roll pin, angled down toward the right side. In normal disassembly, this is not removed.



- 10.** The extractor is retained in the bolt by a cross-pin. This can be driven out toward either side, allowing removal of the extractor and its spring.



- 11.** The ejector and its spring are also retained by a cross-pin in the bolt. **CAUTION:** *If this is to be removed, restrain the ejector, as the spring is compressed.*



- 12.** With a screwdriver carefully fitted to the slot, remove the screw from either safety-lever. The screw has a long threaded section and a fine thread.



13. Remove the safety-lever from the slide.



14. Remove the safety detent spring from the slide.

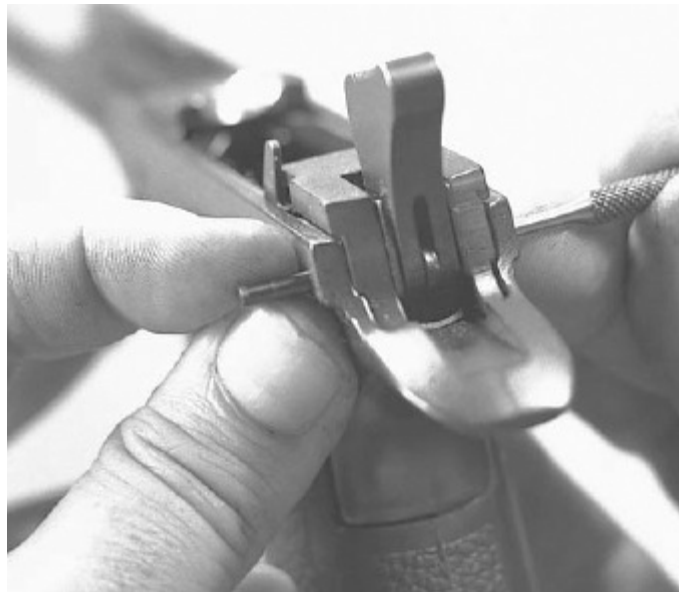


- 15.** Remove the other lever (attached) and the safety cross-piece from the slide. You can, of course, take the other lever and spring off the cross-piece, if necessary. It is best, though, to leave one lever in place, to insure that the cross-piece is reinstalled in the proper orientation.

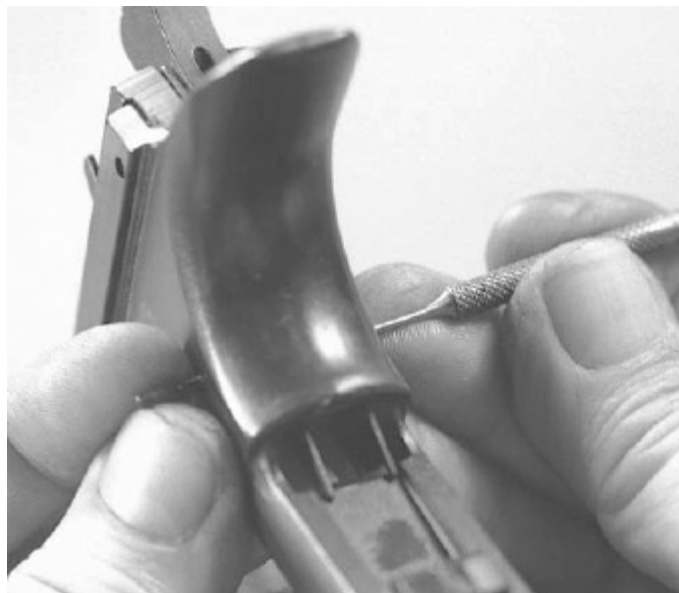


- 16.** Through the access hole in the bottom of the grip frame, depress the plunger and slide the grip unit toward the rear. These are usually fitted tightly. For removal, it will be necessary to flex the

grip piece to clear the front engagement lugs over the frame.



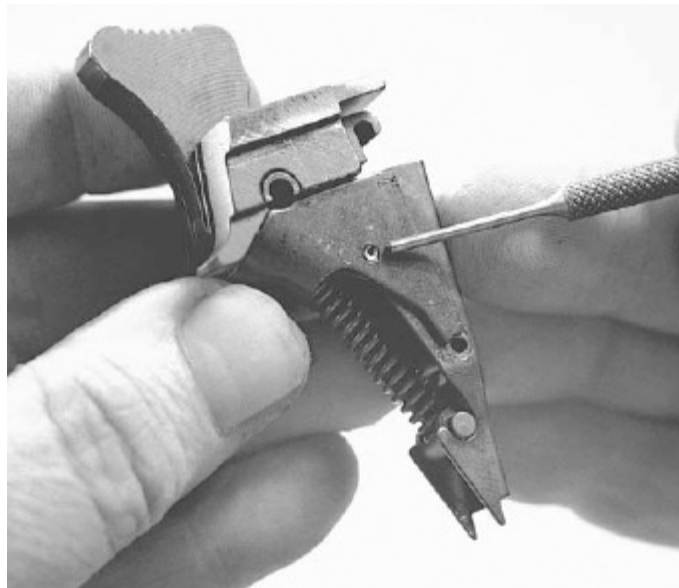
17. Drift out the large cross-pin at the upper rear of the frame.



18. Drift out the small lower cross-pin in the frame.



- 19.** Remove the hammer and sear assembly upward and toward the rear.



- 20.** Drifting out the small roll pin in the hammer unit will allow removal of the shield, giving access to the other parts.



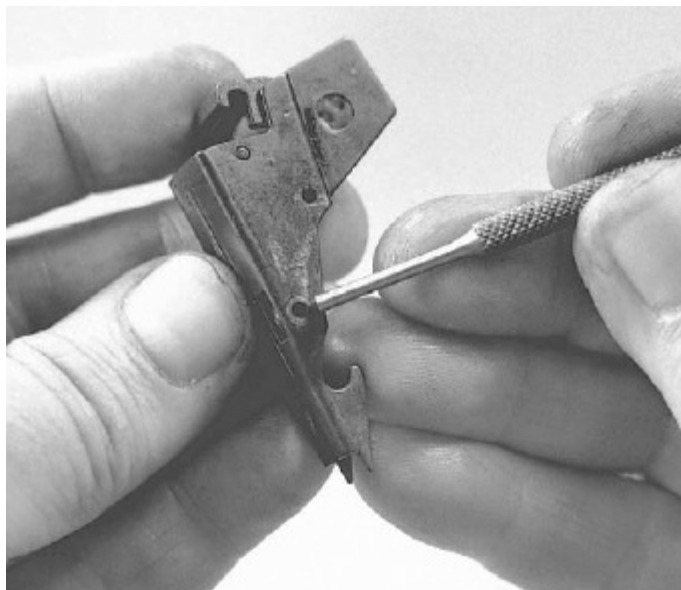
21. Insert a wedge-shaped tool beneath the hammer spring base and lever it upward, out of its recess. **CAUTION:** *Control the hammer spring.*



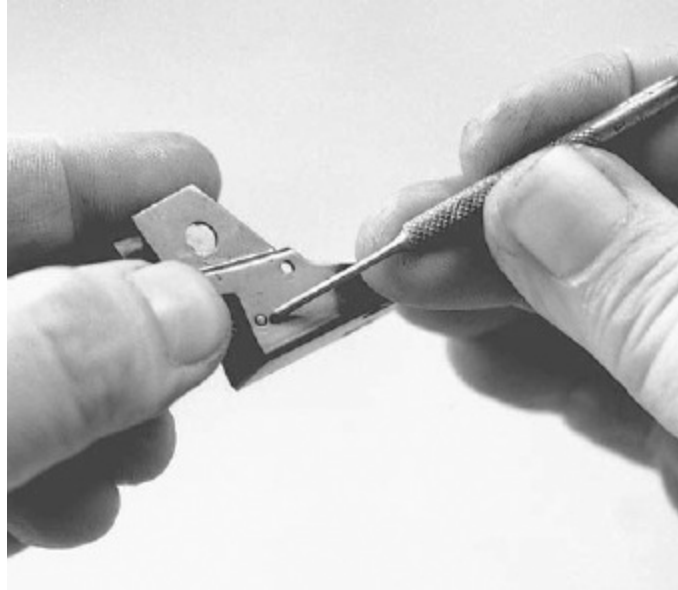
22. Push out the hammer pivot toward either side.



23. Remove the hammer assembly and the upper block of the sub-frame. The hammer strut can be removed by pushing out the small cross-pin.



24. Drifting out the large roll pin in the lower part of the sub-frame will release the sear for removal upward.



- 25.** Drifting out the small pin will release the sear spring. Note that the arms of the spring bear on the inside front of the sub-frame, and the closed loop of the spring bears on the sear.



- 26.** Move the slide-latch to its upper position, and use a tool inside the frame to nudge it outward until its inner lug is even with the inside of the frame.



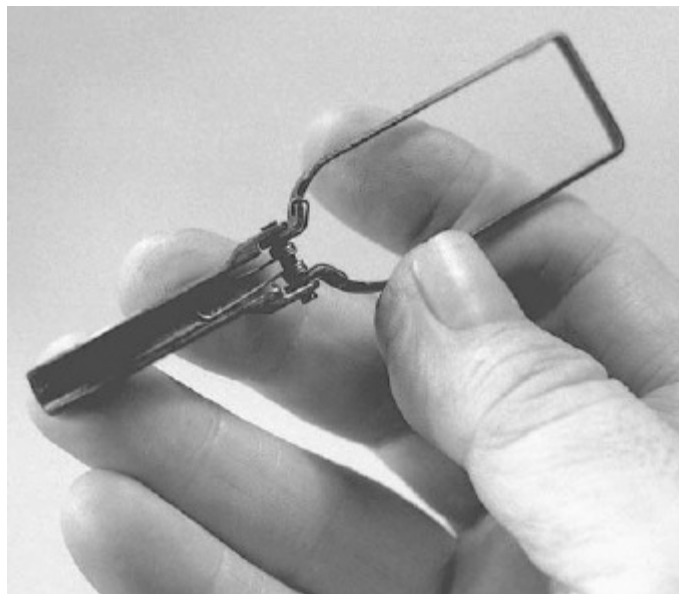
- 27.** Insert a small screwdriver to unhook the turned-in upper arm of the slide-latch spring from its hole in the frame, and remove the spring upward. **CAUTION:** *The spring is under tension—control it.*



- 28.** Remove the slide-latch toward the left.



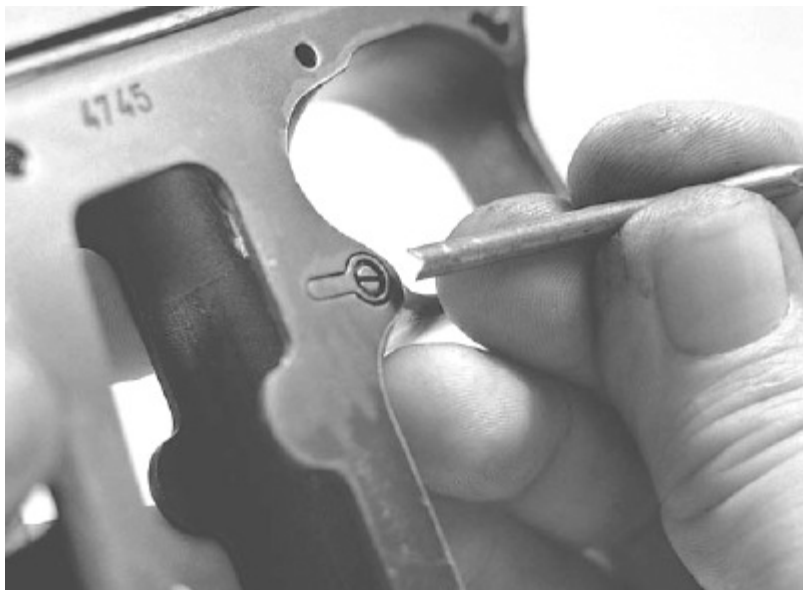
- 29.** Remove the trigger and trigger bar assembly rearward and upward.



- 30.** The trigger bar pin, which also retains the spring, is riveted on both ends. Unless it is necessary for repair, this assembly is best left in place.



- 31.** To remove the takedown-latch system, push the button beyond its usual depression with a wooden dowel or some other non-marring tool. With the lever in its locked position, tilt the lever as shown, and remove it toward the right. The button and spring are then taken out toward the left.



- 32.** Removal of the magazine catch requires the use of a tool with a concave-bevel tip, as shown. This is easily made from a piece of steel rod or a nail of the right size. Set the tool on the tempered

split end of the catch button, and give it a light tap with a small hammer. The button and spring are then taken off toward the left, and the catch piece toward the right.

Reassembly Tips:



1. When the slide-latch is pushed in almost all the way, a very small screwdriver can be used to slip the tail of the latch spring upward until it drops into its groove in the latch.



2. An alternative method for the same operation is to hook the spring into its hole in the frame, place the spring tail in the groove in the latch, and use a tool to hold the spring in engagement while the latch is pushed upward and inward.



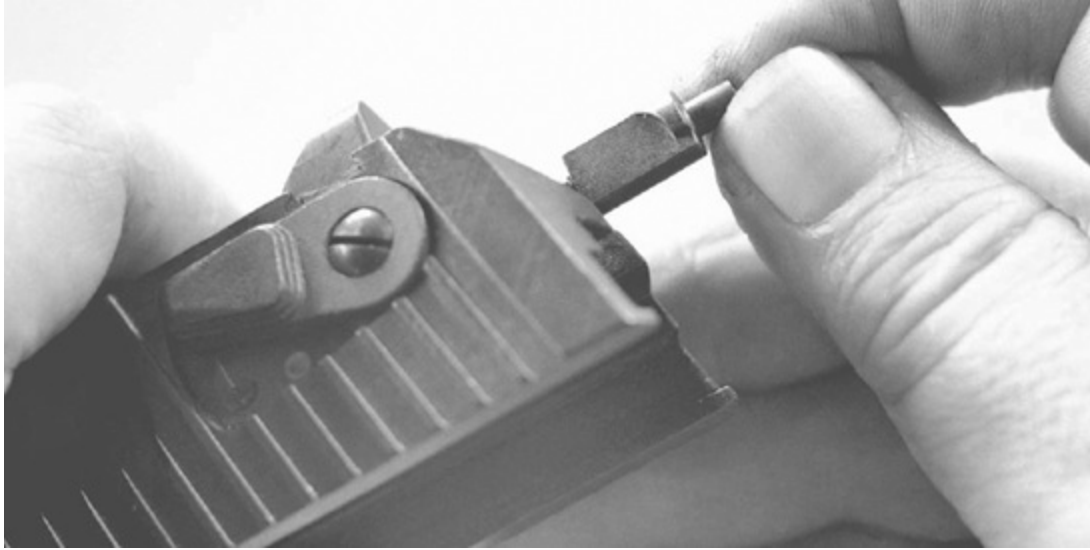
3. When replacing the hammer unit, be sure the lower pointed tips of the sub-frame are hooked on the frame, as shown.



4. If you have removed both safety-levers, be sure the cross-piece is oriented as shown when the unit is reinstalled.



5. When reinserting the bolt stop pin, be sure the bolt is in the position shown, with the extractor on the right side.



- 6.** When the firing pin is installed, be sure the shelves on its head are in the position shown.

Detonics Mark V



Data: Detonics Mark V

Origin: United States

Manufacturer: Detonics 45 Associates
Seattle, Washington

Cartridge: 45 ACP

Magazine capacity: 6 rounds

Over-all length: 6³/₄ inches

Height: 4¹/₂ inches

Barrel length: 3¹/₂ inches

Weight: 29 ounces

The Detonics 45 ACP is the ultimate reduced-size, large-bore autoloader. The Detonics has features often found only on custom guns costing a great deal more. It also has several important innovations that are unavailable elsewhere. While the design is basically Browning/Colt, several important parts and takedown procedures are entirely different. All of the Detonics “Marks” designate options in sights, materials, and finishes, but the guns are mechanically the same.

Detail Strip:



1. With the magazine removed and the hammer cocked, move the slide back until the semi-circular cut in its left lower edge is aligned with the rear tip of the slide latch. Push the tip of the slide latch crosspiece toward the left to start the latch out of the frame.



- 2.** Restrain the slide assembly against the tension of the recoil spring, and remove the slide latch toward the left. Remove the slide assembly toward the front.



- 3.** Lift the rear of the recoil spring assembly away from the barrel, and remove the assembly toward the rear.

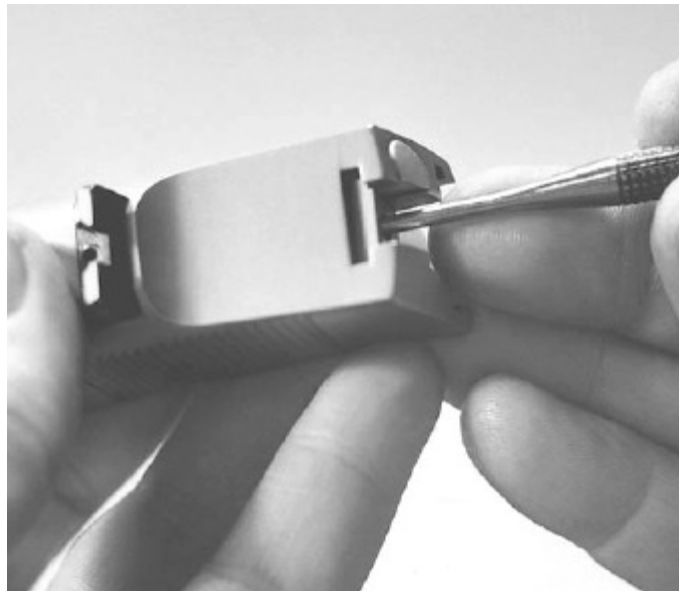


4. If necessary, the recoil spring assembly can be taken apart. There is an Allen screw at the front of the forward sleeve, and removal of this will release the components to be taken off the guide toward the front. **CAUTION:** *The three recoil springs are under tension.* Unless it is necessary for repair, the recoil spring unit should not be taken apart.

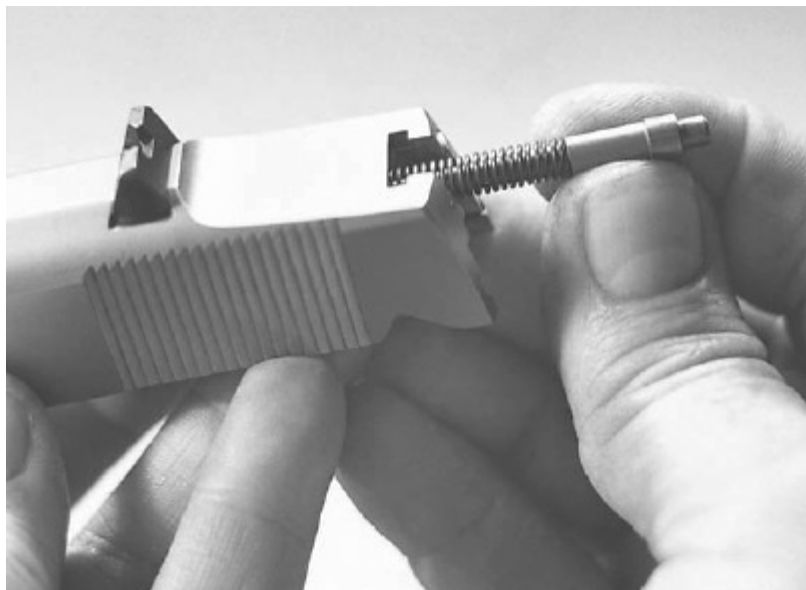


5. Tip the barrel link over forward, and remove the barrel from the front of the slide. The link is cross-pinned to the underlug of the

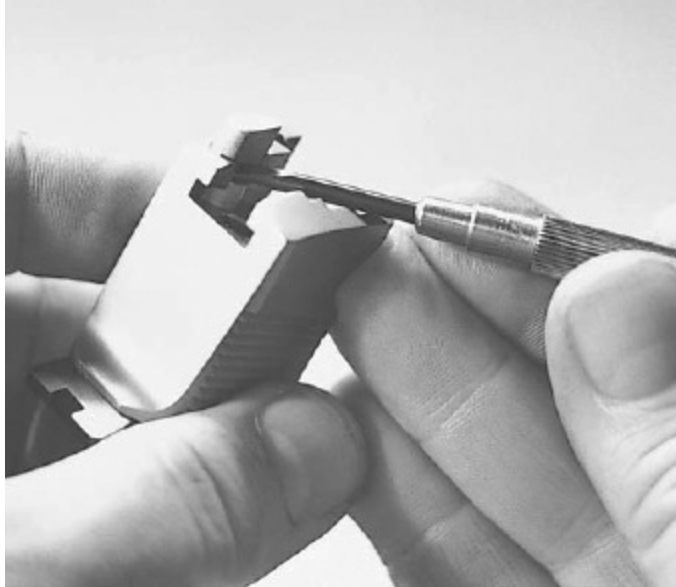
barrel, and is not removed in normal takedown. If removal is necessary, the pin is drifted out to the right.



6. Use a tool to depress the firing pin, and slide the firing pin retaining plate downward. **CAUTION:** *Control the firing pin and its spring as the plate is removed.*



7. Remove the firing pin and its spring from the rear of the slide.



- 8.** Insert a small screwdriver in the firing pin plate track, and lever the extractor toward the rear. After it is nudged out, the extractor can be grasped for removal toward the rear.



- 9.** Backing out the vertical Allen screw at the center of the rear sight will allow the sight to be slid off toward the side.



- 10.** Remove the grips, and lower the hammer to the fired position. Drift out the cross-pin at the lower rear of the grip frame.



- 11.** Slide the mainspring housing downward, and remove it.



- 12.** The mainspring and its follower can be removed from the housing by pushing out the pin on the right side at the top, drifting it inward. **CAUTION:** *This is a strong spring, and it is under tension. Control it, and ease it out.*



- 13.** Remove the combination sear, trigger and disconnect spring from the rear of the grip frame.



- 14.** Move the hammer back to the cocked position. Turn the safety lever to its uppermost position, and remove the safety toward the left.



- 15.** Remove the rear filler piece toward the rear.



16. Remove the safety and slide latch plungers and their common spring toward the rear.



17. Push out the hammer pin and remove it toward left.



- 18.** Remove the hammer from the rear of the frame. The hammer spring strut can be removed by drifting out its cross-pin, but this is not necessary in normal takedown.



- 19.** Note the relationship of the sear and disconnecter inside the frame before removal. Push out the sear/disconnector pin toward the left.



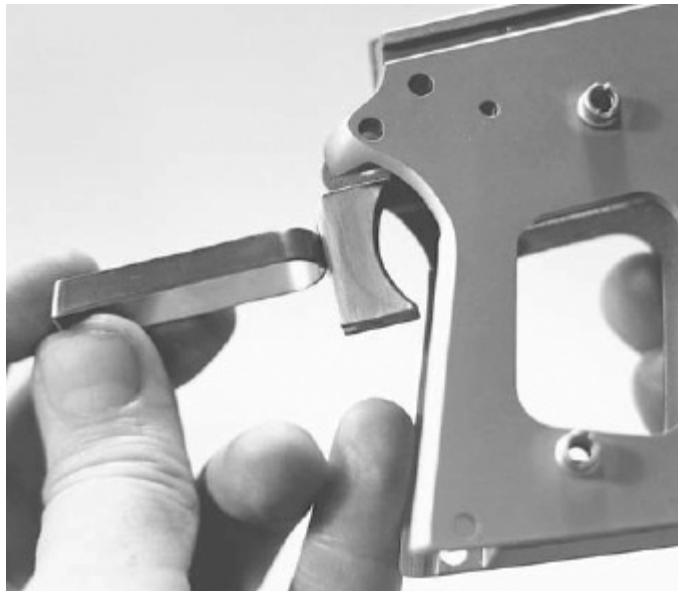
- 20.** Remove the sear and disconnect downward, then toward the rear.



- 21.** Depress the magazine release until its button is level with the frame on the left side, and use a small screwdriver to turn the screw-slotted retainer on the right side counter-clockwise until it stops. Remove the magazine catch assembly toward the right.



22. Turning the retainer back to the right (clockwise) will release the retainer and spring for removal. **CAUTION:** *The spring is under tension.*



23. Remove the trigger toward the rear.



- 24.** The ejector is retained by a cross-pin located in the slide track. The pin need not be drifted entirely out, just far enough to clear the ejector.



- 25.** After the pin is drifted to the right, pry the ejector upward for removal, alternating the tool evenly to each end. The four grip screw escutcheons are also removable by simply unscrewing them, but they have very fine threads, which are easily stripped, and in normal takedown are best left in place.

Reassembly Tips:



1. After the sear and disconnecter are installed, put in the combination spring, hooking its lower tab into the slot inside the grip frame. Slide the mainspring housing partially into place, and it will hold the spring in position during the rest of reassembly. When installing the hammer, be sure the lower tip of the hammer strut engages the concave end of the mainspring follower.



- 2.** When replacing the recoil spring assembly, note that its rear end piece must be oriented as shown.

Diamondback DB9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the DB9 also apply to the following gun:
DB380



Data: Diamondback DB9

Origin: United States

Manufacturer: Diamondback Firearms,
Cocoa, FL

Cartridge: 9mm

Magazine capacity: 6 rounds

Overall length: 5.6 inches

Height: 4.0 inches

Barrel length: 3.0 inches

Weight: 11 ounces

Diamondback Firearms is a new entry into the sub-compact pistol field. A .380 Auto model came first, and a slightly larger 9mm version was introduced in 2011. It is a very small and thin handgun and is a logical entry into the concealed carry market.

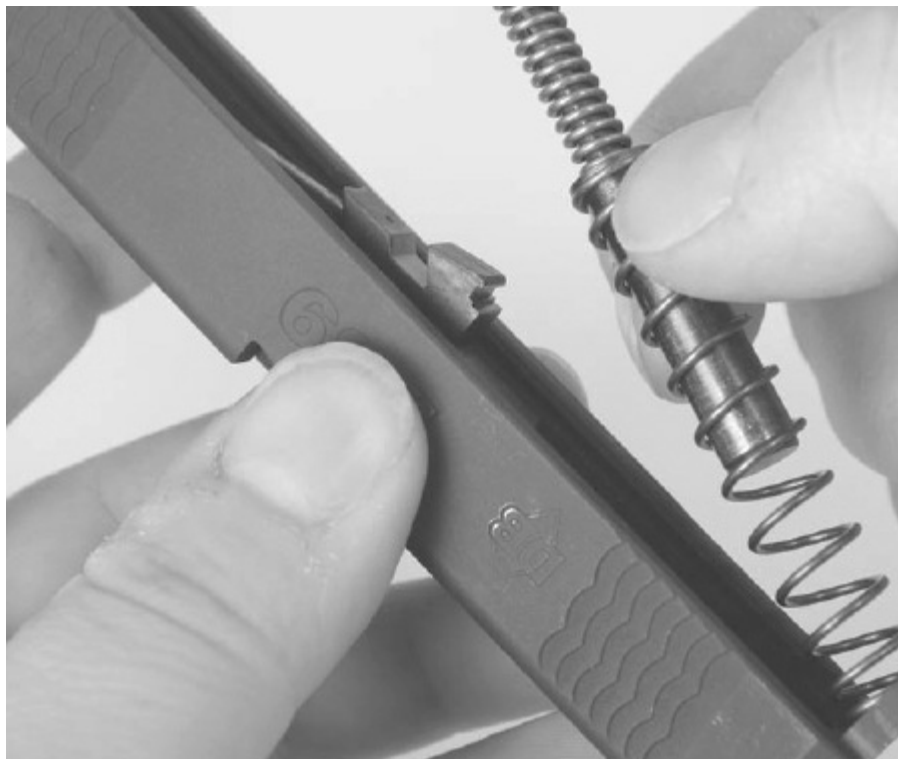
Field Strip:



1. With the magazine removed, pull down on the assembly catch while slightly pulling the slide to the rear to disengage the slide.



2. Pull the trigger then pull the slide forward off the frame.



3. Remove the recoil spring assembly. Note that the large front most spring is not captive while the smaller rear spring is contained within the recoil spring housing.

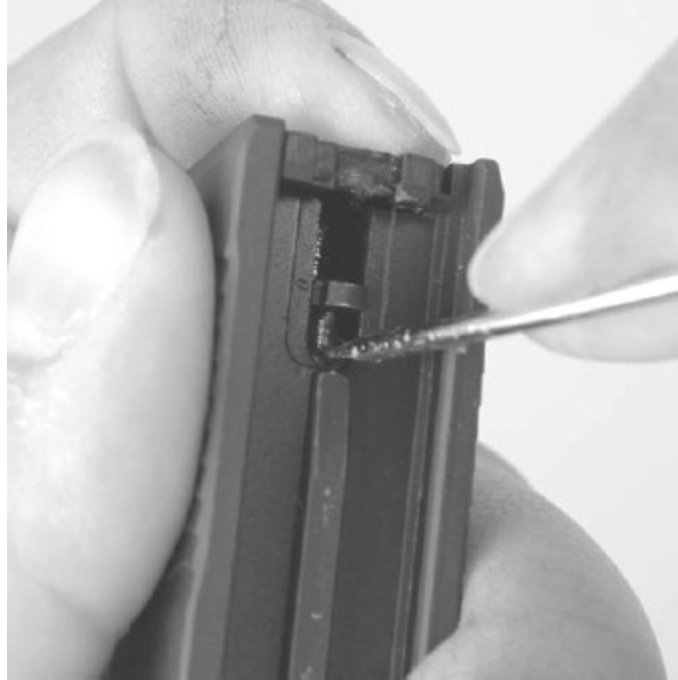


3. Lift the barrel at the back to remove it from the barrel.



Diamondback DB9 field stripped

Detail Strip:



5. Remove the slide rear cover by using a small tool to depress the spacer further into the slide while simultaneously pushing the slide rear cover down and out of the slide.



6. Pull out the extractor spring rod, extractor spring, and extractor

plunger from the rear of the slide.



7. Pull the firing pin assembly from the rear of the slide.



- 8.** Once the extractor plunger is removed, the extractor can be removed by depressing the firing pin block and tipping the extractor into the ejection port.



9. At this point the firing pin block will also fall out of the slide.



- 10.** To disassemble the firing pin assembly, compress the spring and remove the firing pin retainer. The spring and the spacers can then be separated from the firing pin.



- 11.** Drive out the two assembly pins just above the trigger and the single assembly pin at the rear of the frame from right to left. The pins are splined on one end.

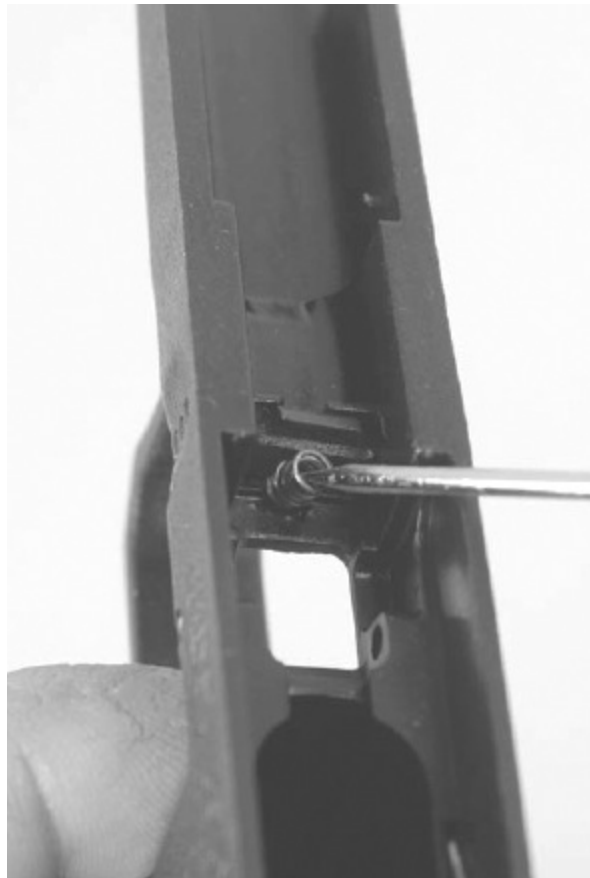


- 12.** Drive out the access pin at the rear of the frame from right to left. Like the other two access pins, it is splined on one end.



- 13.** Pull the cam block which contains the trigger and the rear frame

well which contains the sear assembly straight up and out of the frame.



- 14.** Remove the assembly catch by first pulling the assembly catch spring out from underneath the catch. The catch can then be removed to either side.



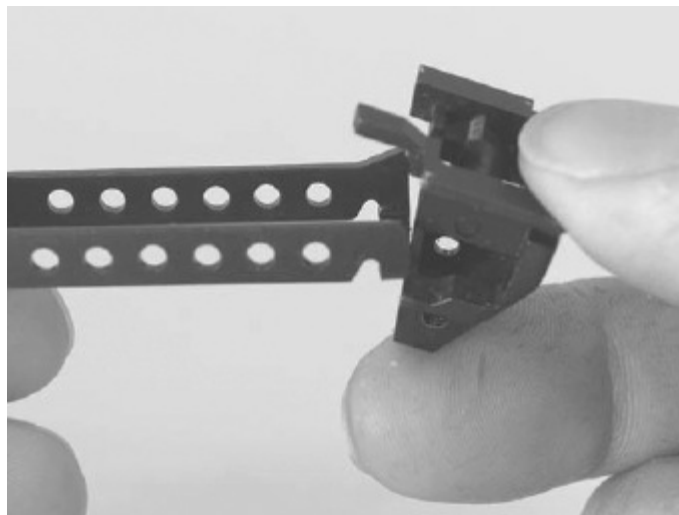
- 15.** The trigger bar rear assist spring can now be pulled out at this time.



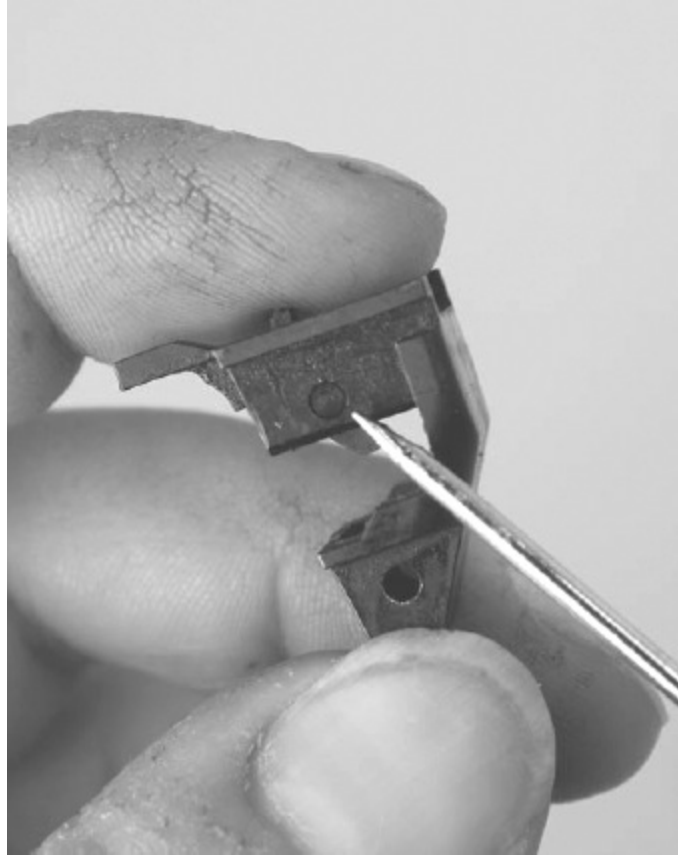
- 16.** Use a thin screwdriver to push a magazine catch spring to the right until it pops out of its slot.



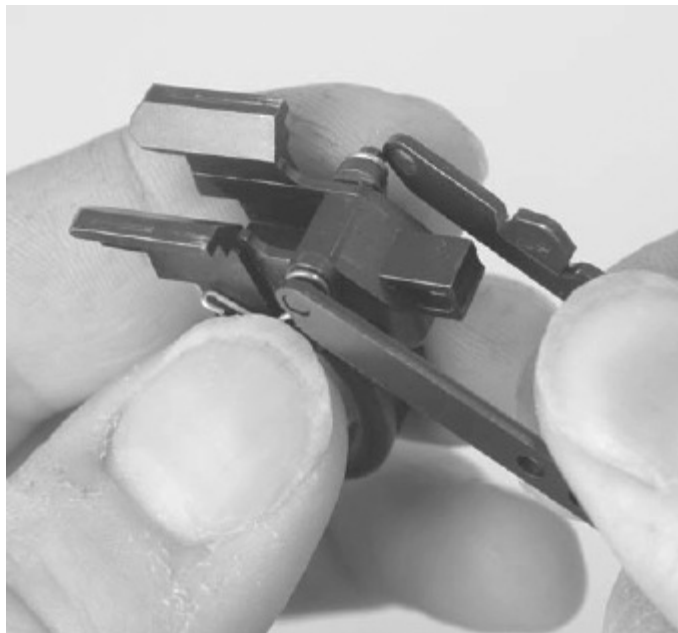
17. Push out the magazine catch from left to right.



18. The rear frame rail can be pulled right off of the trigger bar.



19. The sear and sear spring can be removed by pressing out this pin.



20. Remove the trigger bar from the trigger.



21. Remove the two trigger springs from the trigger.



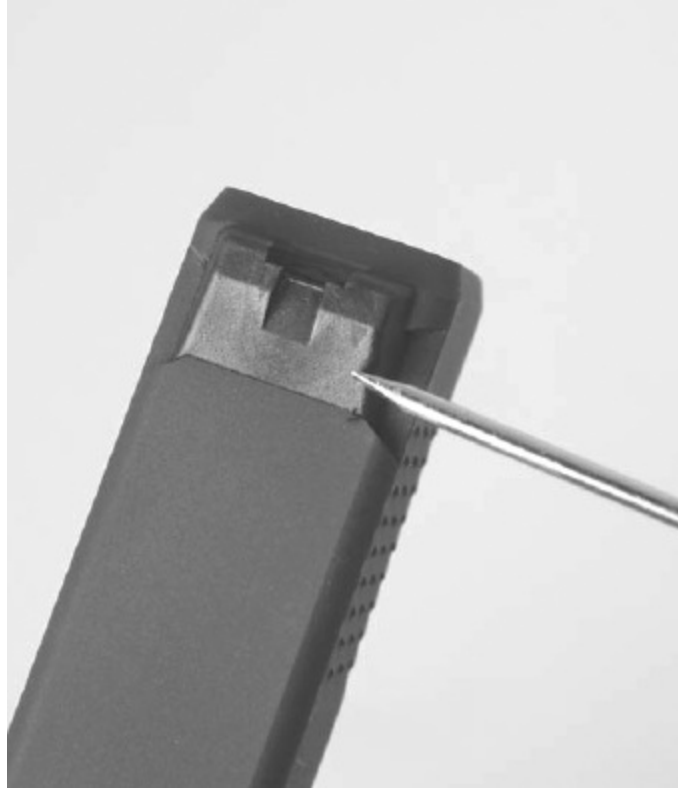
- 22.** Push out the trigger access to remove the trigger from the cam block.



- 23.** Use a small screwdriver to unseat the magazine catch spring. The magazine catch can then be pushed out from left to right.

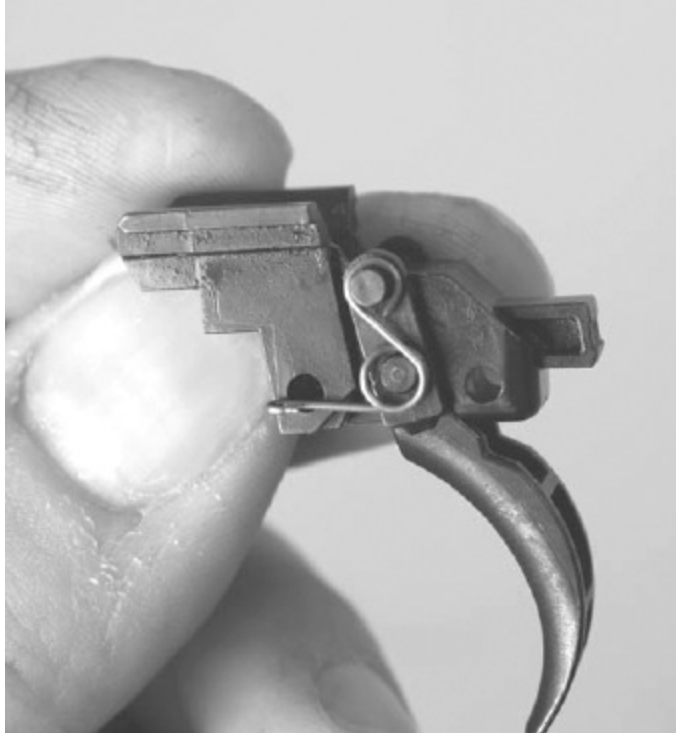


24. The front sight is staked in place. Do not remove unless the front sight is staked in place.

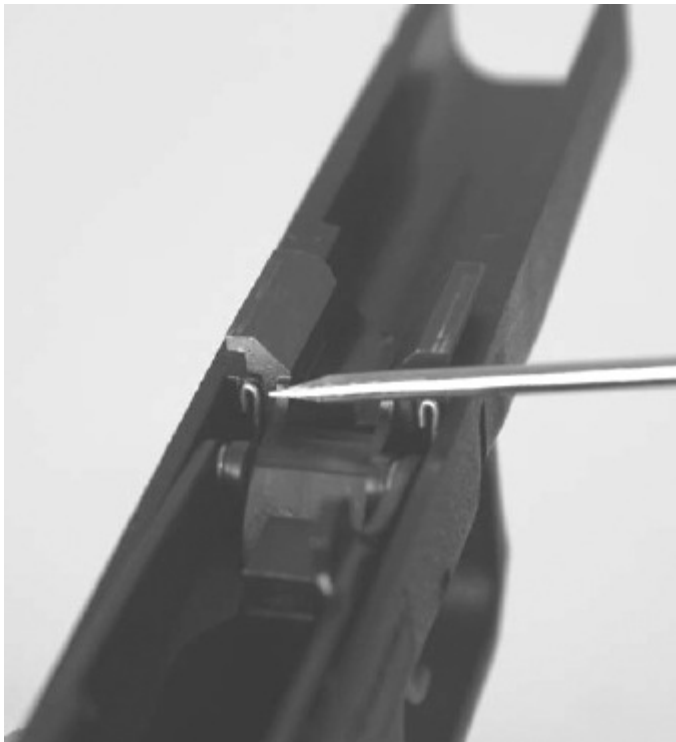


25. The rear sight can be removed by drifting it out to the left.

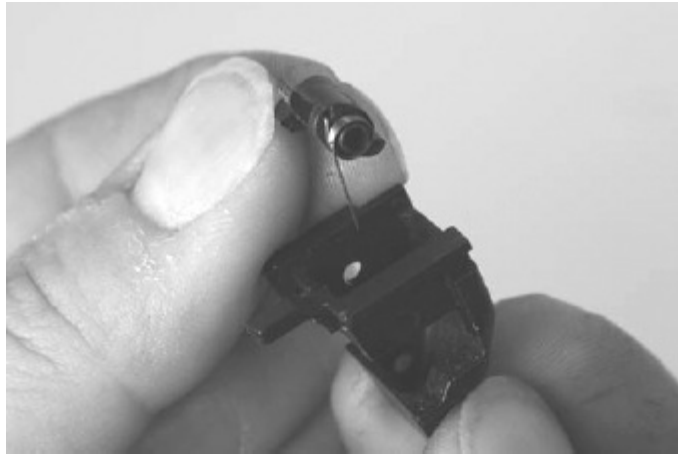
Reassembly Tips:



1. The trigger springs should have two loops and should be oriented like this, with the smaller top loop over the stub of the trigger and the larger bottom loop over the trigger access.



2. The tops of the trigger springs should be seen after the cam block has been reinstalled. Failure to reset both springs in this position will cause damage to the spring when the slide is installed and the pistol is fired.



3. This is the proper orientation for the sear and the sear spring.



4. When reinstalling the access pins, they should go in from left to right with the splines to the left.



- 5.** 5. The assembly catch “hook” should face the rear of the frame when it is reinstalled.

Dreyse Model 1907



Data: Dreyse Model 1907

Origin: Germany

Manufacturer: Rheinische Metallwaaren
und Maschinenfabrik
Sommerda

Cartridge: 7.65mm Browning
(32 ACP)

Magazine capacity: 7 rounds

Overall length: 6¹/₄ inches

Height: 4¹/₄ inches

Barrel length: 3⁵/₈ inches

Weight: 24 ounces

Well-made and nicely engineered, this early auto has, by modern standards, an odd appearance. The designer, Louis Schmeisser, named it after Nikolaus von Dreyse, inventor of the Prussian “needle gun.” This pistol was made for only eight years, from 1907 to 1915, but it must have been produced in large quantity, as it is not uncommon.

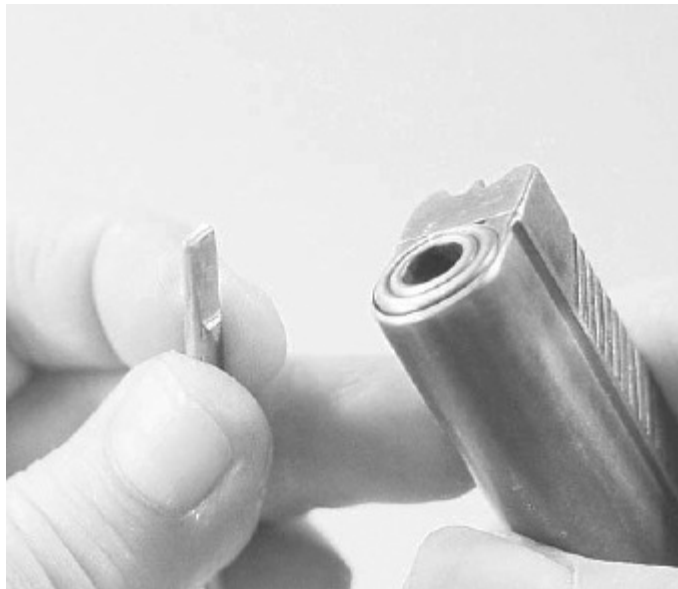
Field Strip:



1. Early versions will have a takedown access cut in the underside of the barrel housing at the muzzle, and the front of the magazine floorplate has a recess to fit the barrel bushing. Don't use it. The floorplate is not strong enough for this purpose.



- 2.** For takedown of the early version, alter the end of an old screwdriver as shown, making a tool to fit the edge of the bushing.



- 3.** For later pistols that do not have the access cut, alter an old screwdriver as shown, with a groove at the tip.



4. With the magazine removed and the striker in fired position, push the latch at the rear of the frame toward the right, and tip the barrel and slide unit over toward the front.



5. On the early version, turn the barrel and slide unit to the position shown, and hook a thumb in the trigger guard to give leverage. Using the tool as shown, depress the barrel bushing until the slide can be moved upward off the lug of the bushing. **CAUTION!** *The recoil spring is powerful, and the spring and bushing can injure*

you if they get away, so control them.



6. Ease the bushing and spring out toward the front, and remove them.



7. Using the notch in the flat face of the bolt stop pin, lift the pin out of its well in the slide. **CAUTION:** *Restrain the bolt assembly while this is done.*

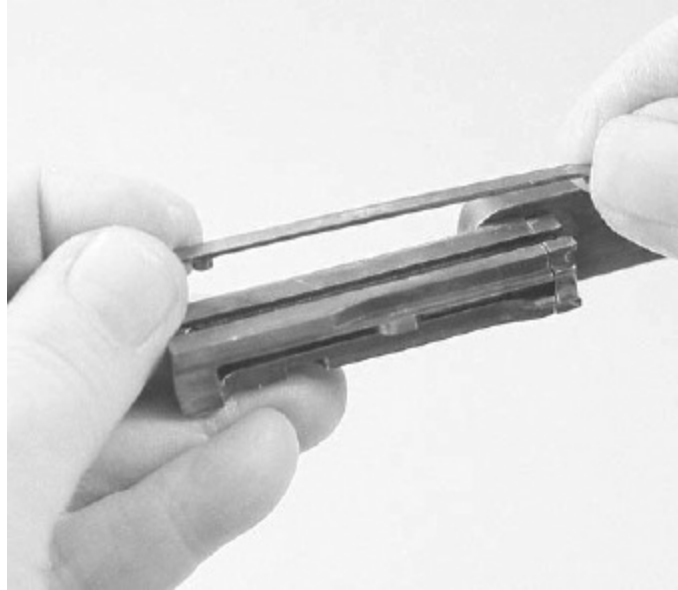


8. If the pistol is a later version, use the tool shown in #3 to push the bushing straight back and lever the slide upward. Again, **CAUTION!** *The same warning applies; keep that powerful recoil spring under control.*

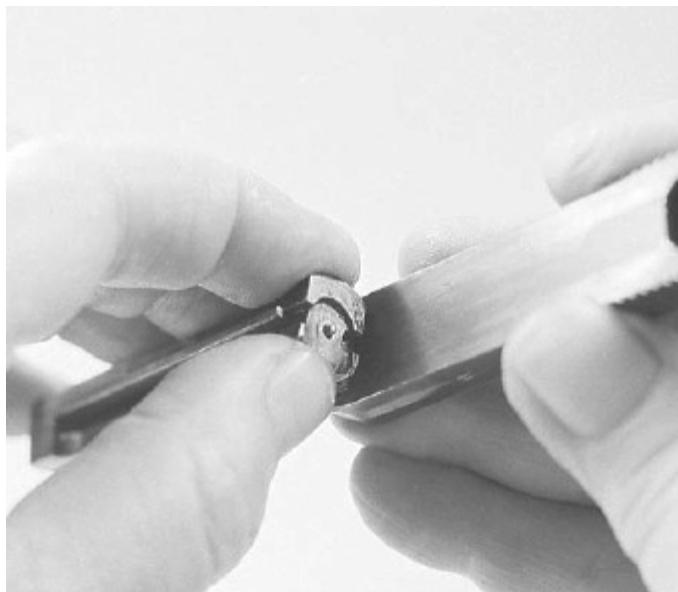


Dreyse Model 1907 field-stripped

Detail Strip:



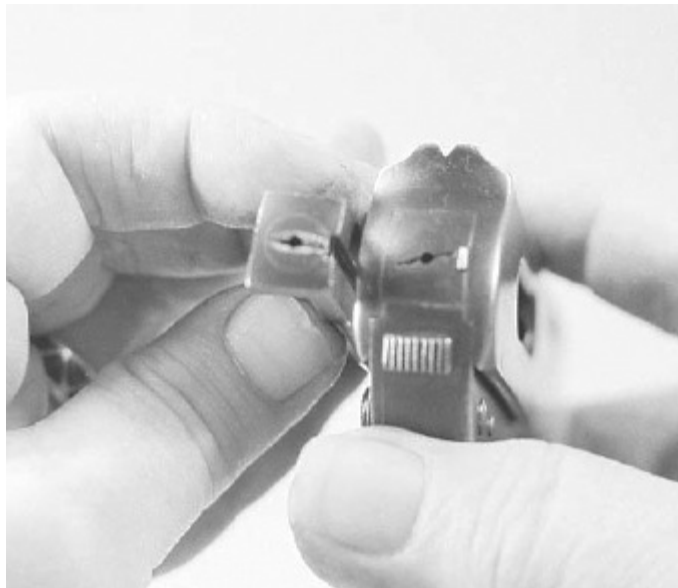
- 9.** The extractor is simply lifted out of its recess on the right side of the breech block in the slide.



- 10.** Turn the breech face in either direction until it clears its retaining recess in the breech block, and take it out toward the front.



- 11.** Remove the striker, spring, and indicator pin/guide from the breech block toward the front.



- 12.** The screw slot in the plug at the rear of the breech block was used only during original factory installation of this part, and removal was not intended. Even so, on the one at left, someone tried.



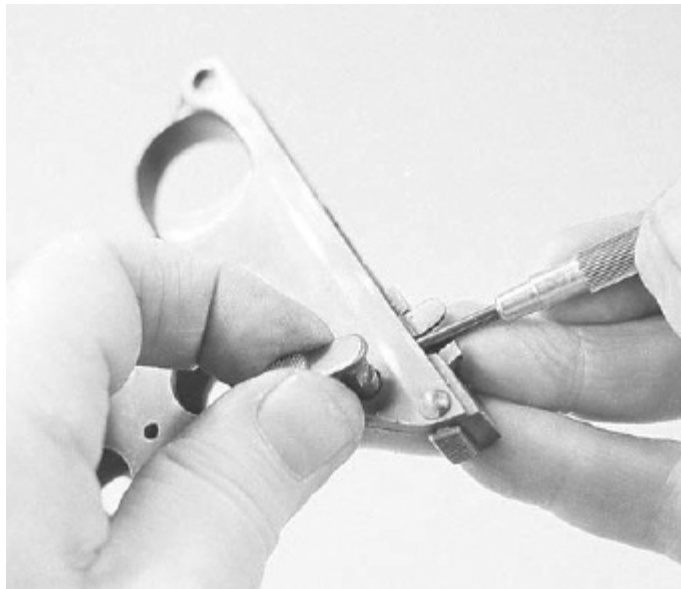
- 13.** Remove the pivot screw at the front of the frame, and take off the barrel and slide housing.



- 14.** Removal of this screw will allow the ejector to be taken out by nudging it forward. However, it is usually very tightly fitted, and in normal takedown it is best left in place.



- 15.** Turn the manual safety lever to the position shown, and insert a tool at the top of the frame to gently pry the safety spring out of its recess in the cross-shaft.



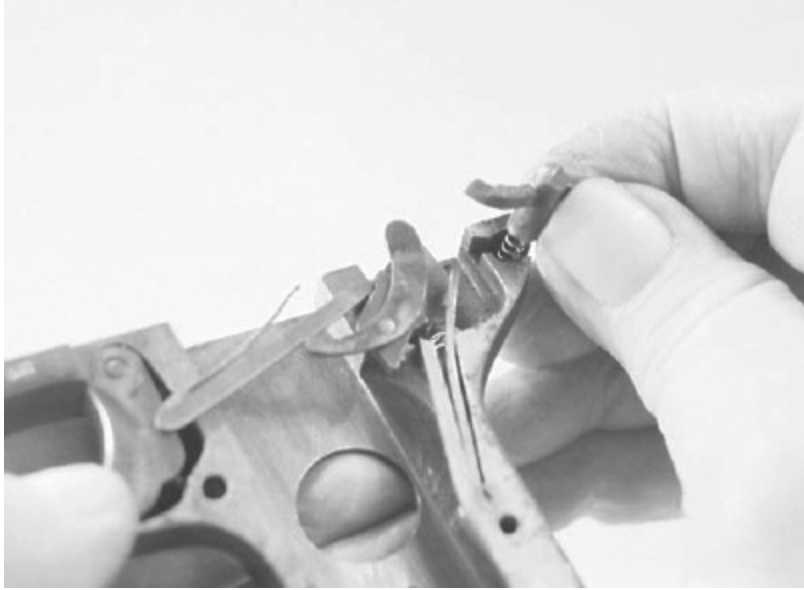
- 16.** Keeping the spring out of its recess, remove the safety toward the left. Slight manipulation may be necessary, but use no extreme force.



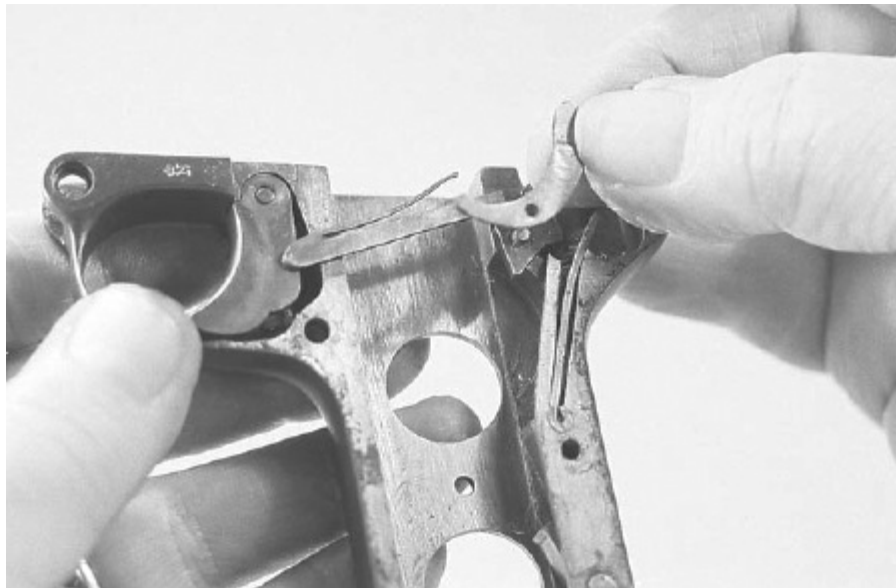
- 17.** Remove the two screws on the left side. The one at the rear is short, and the one behind the trigger goes all the way through the frame.



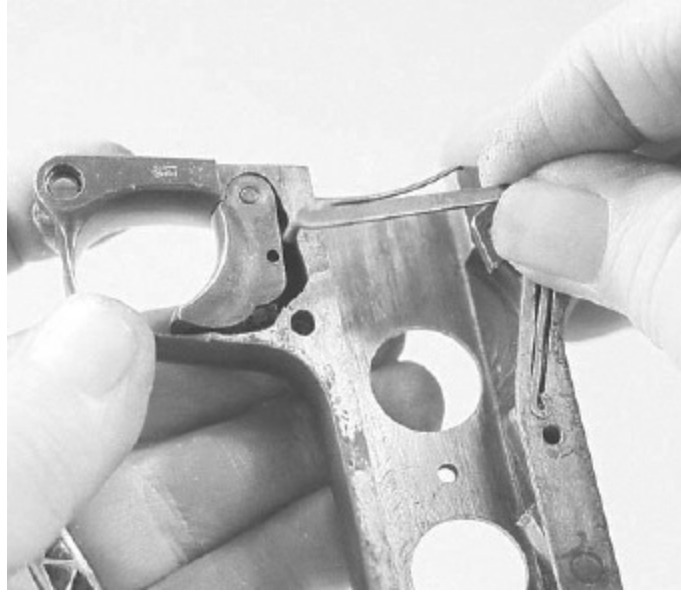
- 18.** Remove the sideplate from the frame. Note the location and relationship of the parts, to aid reassembly.



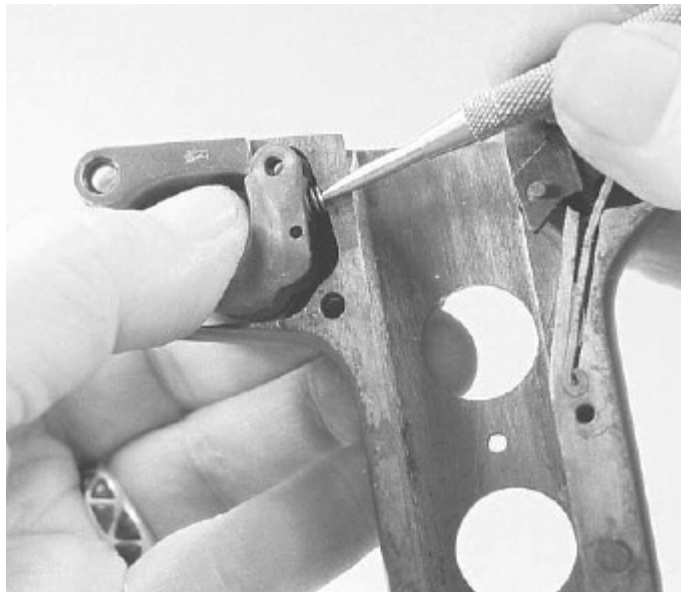
19. Remove the upper assembly latch and its coil spring from the rear of the frame.



20. Remove the disconnecter.



21. Remove the trigger bar.



22. Remove the trigger and its coil spring. Note that the spring will be released as it clears the frame ledge. Control it.



- 23.** Flex the top of the safety spring slightly forward, and remove it from the frame.



- 24.** Remove the sear from the frame. Note that the sear spring will be released as the bottom of the sear clears. Hold a fingertip at the top to arrest it.



- 25.** The pin that pivots and retains the magazine catch has an enlarged head on the left side, and must be pushed out toward the left. The magazine catch and its coil springs are then removed downward.

Reassembly Tips:



- 1.** The trigger bar and disconnect are shown here, for illustration

only, in their recess in the sideplate. As the plate is put back on the frame, be sure the spring arm of the trigger bar is under the shelf of the recess, and that the lower end of the disconnecter is beneath the trigger bar. It will be necessary to insert a tool from the top to insure this. When replacing the sideplate, use no force. If it doesn't snug up easily, something is out of place.

When reinstalling the safety, it will again be necessary to insert a tool at the top to move the spring forward as the safety is pushed into place. Some manipulation may be necessary, but use no force.

F.I.E. TZ75 Series 88

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the F.I.E. TZ75 Series 88 also apply to the following guns:

Action Arms AT84

EAA Witness

F.I.E. TZ75

Action Arms AT88

Excam TA90

Springfield Armory P9

Czech CZ75

Excam TA90 Baby

Springfield Armory P9C



Data: F.I.E. TZ75 Series 88

Origin: Italy

Manufacturer: Fratelli Tanfoglio, S.p.A.,
Gardone, V.T., (Brescia)

Cartridge: 9mm Luger

Magazine capacity: 15 rounds

Overall length: 8.12 inches

Height: 5¹/₂ inches

Barrel length: 4¹/₂ inches

Weight: 35 ounces

In 1983, the brothers Tanfoglio began producing an excellent copy of the famed Czech CZ75 pistol. The first production series had a slide-mounted firing pin safety, but otherwise it was mechanically the same as the CZ75. F.I.E. imported the gun as the TZ75, and Excam called it the TA90. A compact version was also made. In addition to the original CZ75, other guns which the instructions will cover are the Action Arms AT88 and the Springfield Armory P9, both of Tanfoglio origin. The F.I.E. Series 88 pistol shown here is very close to the original Czech design. The few small differences will cause no difficulty in takedown or reassembly. The pistol is currently marketed by European American Armory as the Witness.

Field Strip:



1. With the magazine removed and the hammer cocked, move the slide back until the stamped dots on the lower edge of the slide and the upper rear edge of the frame are aligned. (Note that on some pistols these reference marks may be vertical lines, or a line and a dot.)



2. With the slide held in that position, push on the right tip of the slide-latch cross-shaft, and remove the slide-latch toward the left.



3. Pull the trigger and gently lower the hammer to its fired position. Remove the slide and barrel assembly toward the front.



4. Disengage the rear tip of the recoil spring guide from the underlug of the barrel, and remove the guide and spring toward the rear. **CAUTION:** *The spring is under tension—control it.*



5. Remove the barrel from the underside of the slide. **Gun is now field-stripped.**



F.I.E. TZ75 Series 88 field-stripped

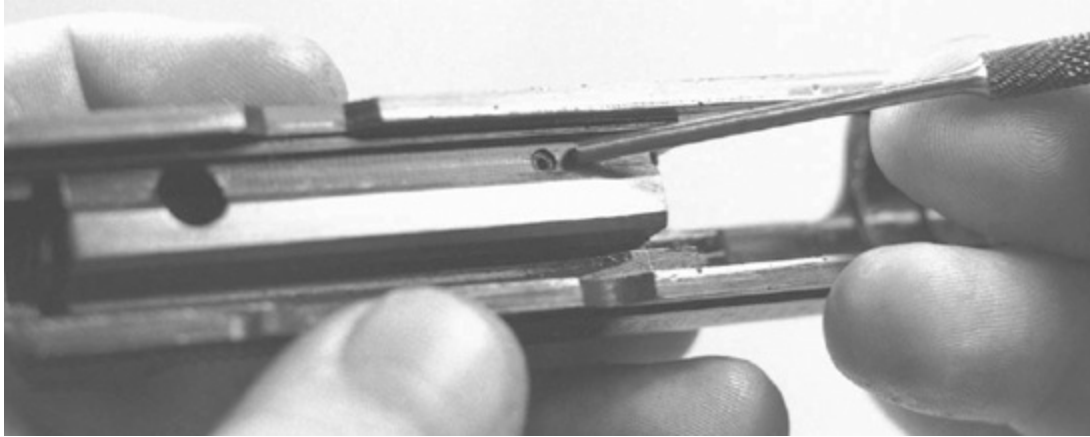
Detail Strip:



6. Depress the firing pin head with a tool, and move the retaining plate downward. **CAUTION:** *The spring is under tension, so control it.* Remove the firing pin and its spring toward the rear.



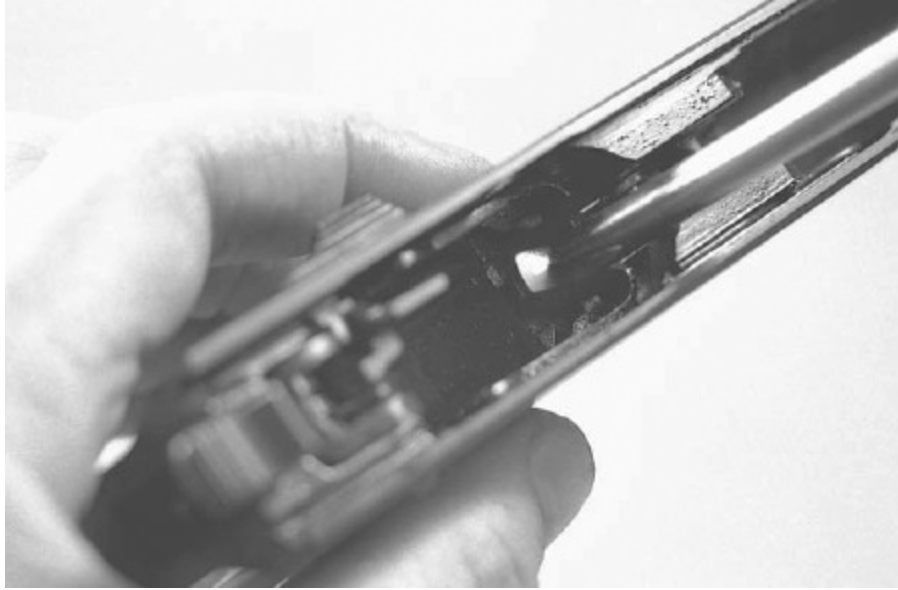
7. Removal of the firing pin will release the firing pin safety lock for removal from the underside of the slide, along with its small coil spring. Note the orientation of the lock piece as it is taken out, to facilitate proper reassembly.



8. The extractor and its coil spring are retained and pivoted on the right side of the slide by a vertical roll pin. This is best driven out upward, and the extractor and spring are taken off toward the right.



9. The magazine catch is reversible for left-handed shooters. Removal requires the depression and rotation of a plunger called the trigger bar guide, located inside the frame behind the trigger. This can be done by using two small tools, but the best way is to alter an old Phillips screwdriver to the configuration shown.



- 10.** Depress the trigger bar guide, and turn it 180 degrees (a half-turn) in either direction, so its extension is pointing back toward the rear.



- 11.** Hold a fingertip over the hole in the blank side of the magazine catch, and lift the trigger bar guide with a tool until it can be taken out upward. The fingertip will prevent escape of the magazine catch plunger and spring as they are freed by the lower tip of the guide.



- 12.** The head of the trigger bar guide is attached to its guide rod by a small roll pin at the top, and it can be separated by driving out this pin. In normal takedown, this is best left in place.



- 13.** Remove the magazine catch toward the left.



- 14.** Removal of the smaller cross-pin forward of the hammer pivot will allow the sear and disconnecter to be taken out of the rear of the frame.



- 15.** Drift out the large cross-pin at the lower rear of the grip frame.
CAUTION: *The mainspring is under tension. Be sure the hammer is in the fired position, and restrain the hammer spring base or cup at the bottom of the grip as the drift punch is taken out.*



- 16.** Partially withdraw the drift, until it will hold the cup in place but will free the center, and flex the magazine friction piece out of its lower engagement.



- 17.** Restrain the spring base, remove the drift punch, and ease out the base and the mainspring downward.



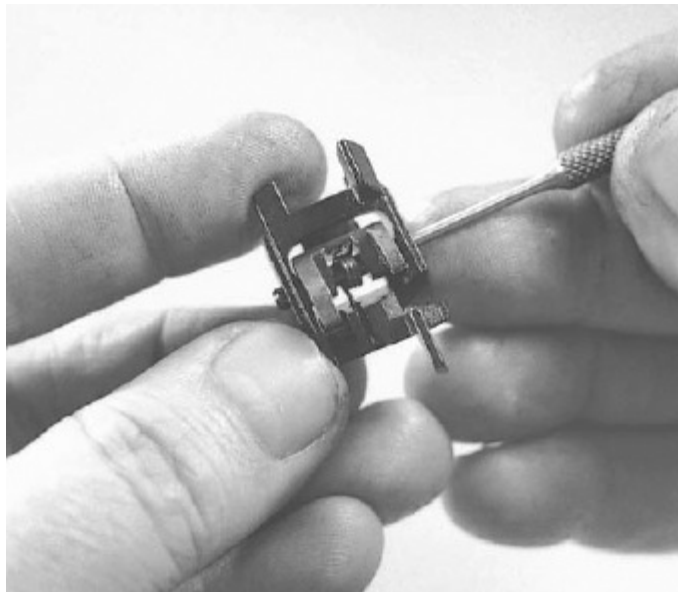
- 18.** Push out the small cross-pin at the top, and remove the magazine friction piece downward.



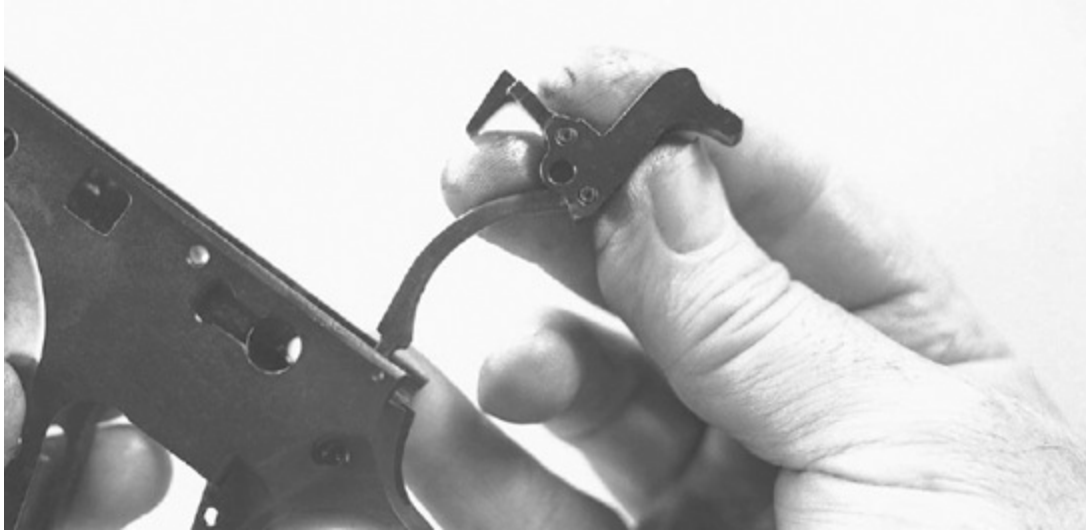
- 19.** With the safety in on-safe position, use a small screwdriver to lift the front arm of the sear spring out of its groove in the safety shaft, and move the safety out toward the left. **CAUTION:** *As the safety comes out, the safety detent plate and its spring may be released. Restrain these small parts, and take care that they are not lost.*



20. Remove the sear and ejector sub-frame upward.



21. Pushing out the cross-pin in the sub-frame will release the sear and its torsion-type spring for removal. **CAUTION:** *The spring is under tension.* Note its orientation before removal, for proper reassembly.



- 22.** The hammer is pivoted and retained by a large roll pin in the upper rear of the frame. Use a roll pin punch to avoid deformation of the pin, and drift it out toward either side. Remove the hammer assembly upward. The double-action lever and the hammer strut can be separated from the hammer by drifting out the cross-pins, but in normal disassembly they are best left in place.



- 23.** Use a roll pin punch to drift out the trigger cross-in. **CAUTION:** *As the drift is removed, the trigger spring will be released, so control*

it. Remove the trigger and the attached trigger bar upward. Drifting out the small roll pin will allow separation of the trigger and trigger bar. In normal takedown, they are best left together.



- 24.** The slide stop is retained inside the right side of the frame by a short cross-pin that is removed by driving it inward, toward the left. Because of the possibility of marring, it is best to leave this in place unless repair is necessary.

Reassembly Tips:



- 1.** To prepare the trigger system for reassembly, begin by putting

the short arm of the spring inside the front of the trigger, as shown. A slave pin will be necessary for the next step.



- 2.** Turn the spring and push it into position for insertion of the slave pin, to hold the spring in place during replacement of the cross-pin.



- 3.** There is an access hole in the safety-lever for insertion of a small drift punch to hold the spring and detent plate in place while the shaft of the safety is pushed back into the gun.



4. As the safety shaft is pushed in, the tip of the sear spring must be lifted again (as it was during disassembly) for passage of the shaft. As the lever nears the frame, use a very small tool to position the detent plate so it will enter its recess in the frame.



5. When replacing the magazine catch, insert a small tool to depress its plunger and spring as the trigger bar guide is reinserted and turned into locked position.



6. When installing the hammer spring base, insert a drift punch just far enough to retain it, with the center clear for reinsertion of the lower loop of the magazine friction piece. When that is in position, move the drift in to catch it, then drive in the cross-pin, forcing out the drift. Be sure the parts are properly aligned.

FNH FNP-9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the FNP-9 also apply to the following gun:
FNH FNP-40



Data: FNH FNP-9

Origin: Belgium

Manufacturer: Fabrique Nationale
d'Armes de Guerre,
Herstal

Cartridge: 9x19mm

Magazine capacity: 16 rounds

Overall length: 7.4 inches

Height: 5.4 inches

Barrel length: 4.0 inches

Weight: 24.7 ounces

The FNP series of pistols available in 9mm and .40 caliber are a traditional double action handgun offering from Fabrique Nationale. They are a lightweight, reliable, and easy to use possessing a decocking lever rather than a manual safety. The grip can be modified with a removable back strap and was very reasonable priced. An almost identical model marketed under the Browning name was also briefly sold in the United States. This gun had a manual safety instead of a decocking mechanism and was for all intents and purposes the same gun made in the same factory with minor cosmetic changes. In 2010 the FNP was phased out and replaced with the FNX series of pistols. Also available was a FNP in 45ACO, which was significantly larger but otherwise substantially the same as the smaller 9mm and .40 caliber versions.

Field Strip:



1. Lock the slide back. The takedown lever is on the left side of the frame. Rotate it down.



2. Pull the slide forward off the frame.



3. Remove the recoil spring assembly.



4. Tilt the barrel up and pull it out the barrel toward the rear.



FNH FNP-9 field stripped

Detail Strip:



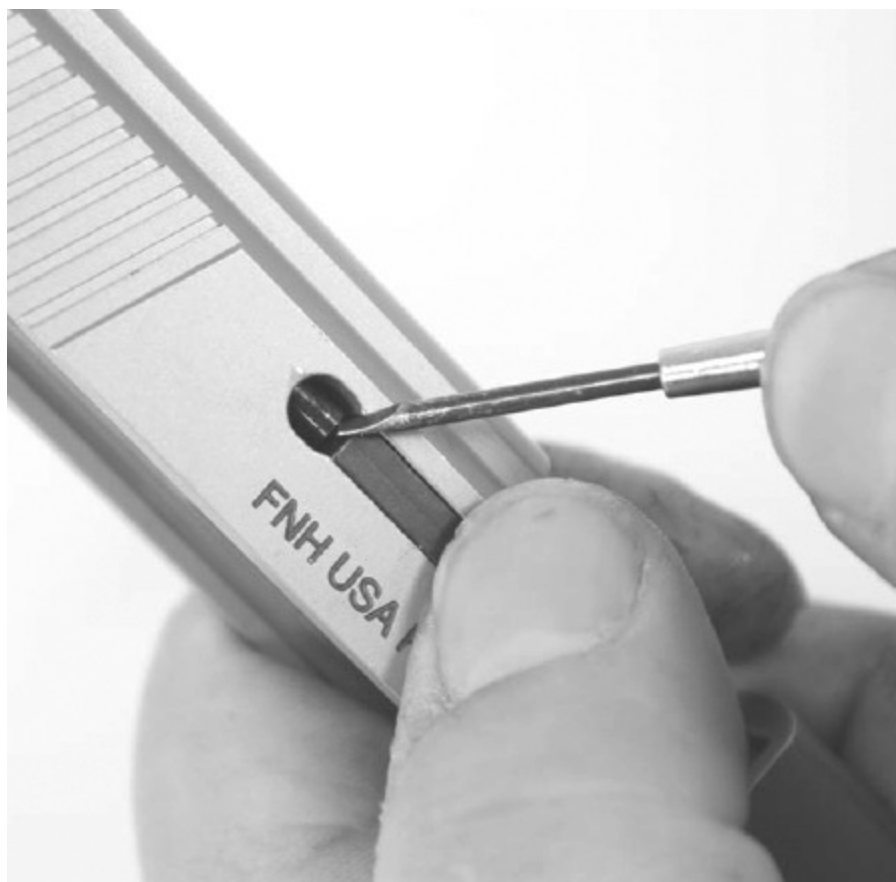
- 5.** While depressing the firing pin safety, push in the firing pin while pulling down on the firing pin retainer to remove it.



- 6.** The firing pin and firing pin spring can now be removed from the back of the slide.



7. Drift out the rear sight from left to right to gain access to the firing pin safety and spring. Remove the firing pin block and spring. The front sight can also be drifted out from left to right if needed.



- 8.** To remove the extractor, push the extractor plunger in and then roll the extractor into the ejection port.



9. To remove the magazine catch, lift up on the magazine catch spring and pull it out the top of the frame. The magazine catch can then be removed to the left or the right.



- 10.** Remove the takedown lever from the frame by pushing it out to the left while it is pointed down.



- 11.** Unscrew this screw to remove the back strap.



- 12.** There are two pins that hold internal parts into the frame, one just below the hammer and one just above the trigger.

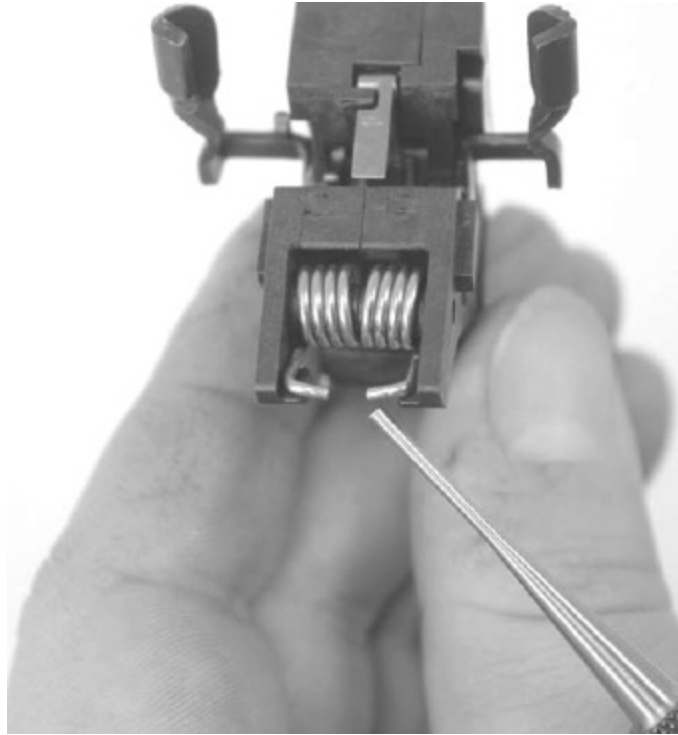


- 13.** With the hammer and trigger pins removed, pull out the fire

control housing assembly. The trigger assembly will start to come with it but will detach on its own.



- 14.** First remove the decock rebound lever and its spring carefully as the spring is compressed.



- 15.** Remove hammer tension by displacing these two spring legs from their seats.



- 16.** Push out the hammer bushing to free the decocking lever and hammer.



- 17.** Remove the decocking lever by pulling down and to the back.



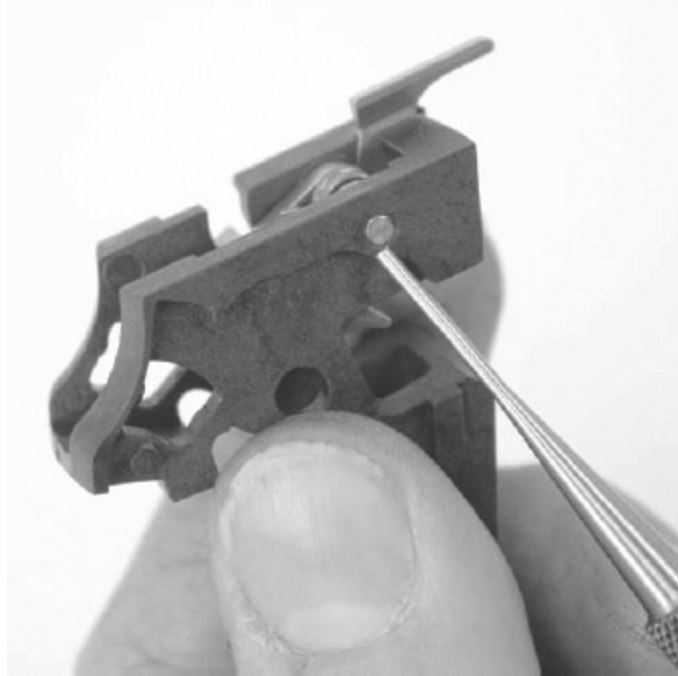
18. Pull the hammer up and to the rear.



- 19.** The hammer link and its pin may not be removed unless service is required.



- 20.** Push out this pin to remove the sear, sear actuator and their springs.



21. Push out this pin to remove the hammer springs.



- 22.** Push down on the trigger spring to dislodge it from its seat on the trigger bar.



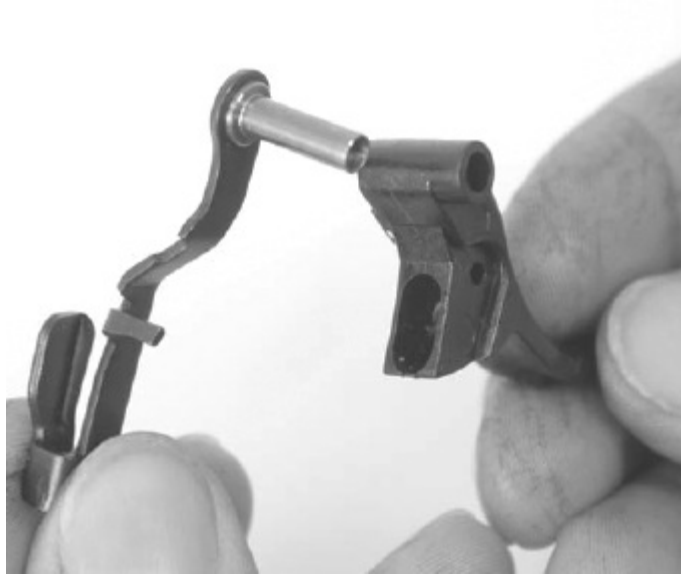
- 23.** Pulling the trigger down so that the trigger bar pin is exposed, punch the pin out to separate the trigger bar from the trigger.



24. The trigger bar can now be removed from the top of the frame.



- 25.** Grasp the slide catch and pull it up and out of the frame, pulling the trigger with it. The trigger may require a small amount of force to push through as the clearance is very small.



- 26.** The slide catch now pulls out of the left side of the trigger.



- 27.** The rear frame rails are held in place by this wire. It is not

necessary to remove them unless repair or replacement is required.

Reassembly Tips:



1. Resetting the hammer springs onto their seats is made much easier by using a hollow nose of a roll pin punch.



- 2.** The trigger pin has a groove on the left side. Be sure it goes in with the groove facing to the left.

FN Model 1922

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the FN Model 1922 also apply to the following gun:

FN Model 1910



Data: FN Model 1922

Origin: Belgium

Manufacturer: Fabrique Nationale,
Herstal (FN)

Cartridge: 32 Auto (also 380 Auto)

Magazine capacity: 9 rounds

Overall length: 6.87 inches

Height: 4.68 inches

Barrel length: 4.37 inches

Weight: 24 ounces

The original Model 1910, a John Moses Browning design, was a smaller gun. In 1922, for a military/police contract order from Yugoslavia, the FN factory made the slide, barrel, and grip frame longer. Several other nations liked the increased size and magazine capacity, and also adopted the pistol. During World War II, under the German occupation of Belgium, the Model 1922 was produced in large quantity. The pistol shown here is one of those.

Field Strip:



1. With the striker in fired position and the magazine removed, push the slide extension latch forward to free the extension for turning (either direction). **CAUTION!** *Control the extension, as the recoil spring will force it outward when the retaining lugs align with their exit tracks.* If the pistol is a Model 1910, simply push in the barrel

bushing, and turn it.



- 2.** Ease the slide extension out, and remove it. The little latch and its coil spring can be pushed out of the extension, if necessary.



- 3.** Move the slide rearward, and use the safety lever to lock it in position, as shown. This will locate the slide for the next step in takedown.



4. Turn the barrel counter-clockwise (front view) until it stops. Release the safety, and move the slide and barrel assembly off the frame.



5. Turn the barrel back to original position (its locking lugs will be visible on the underside), and remove the barrel toward the front. The recoil spring is easily taken off. Note that its front coil is larger.



6. Remove the striker assembly. The striker, spring, and guide are easily separated.



FN Model 1922 field-stripped

Detail Strip:



7. Drifting out the extractor pin downward will allow removal of the extractor and its coil spring. The rear sight can be driven out of its dovetail mount, if necessary.



- 8.** Turn the safety lever to its upper-most position, and it will spring outward for removal, along with its coil spring.



- 9.** Remove the grip screw and take off the grip panels. Restrain the grip safety at its lower end, and drift out the pivot pin.



- 10.** Remove the grip safety rearward and downward.



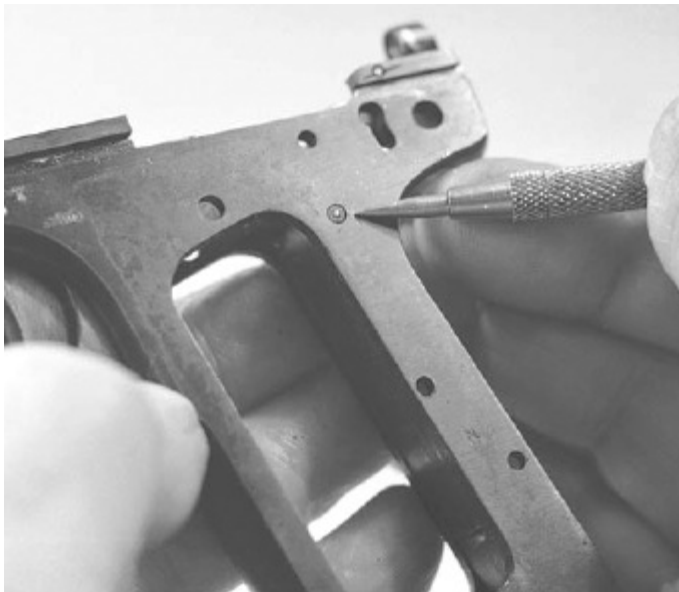
- 11.** Move the magazine catch slightly rearward and take it out downward, along with the combination spring. The spring is easily detached.



- 12.** Drift out the sear cross-pin, and remove the sear. The smaller sear limit pin, at upper rear, need not be removed.



13. Remove the trigger bar/disconnector upward and toward the rear.



14. Drift out the magazine safety cross-pin.



15. Remove the magazine safety and its coil spring.



16. Drift out the trigger cross-pin, and tip the trigger forward, into the guard opening, for removal.

Reassembly Tips:



- 1.** When installing the sear, note that its rear tip must be positioned beneath the limit pin.



- 2.** Be sure the upper arms of the combination spring are properly engaged with the trigger bar on the left, and the sear on the right.



- 3.** As the grip safety is re-installed, depress it and insert a drift to position it for insertion of the cross-pin.

French Model 1935-A



Data: French Model 1935-A

Origin: France

Manufacturer: Societe Alsacienne
de Constructions
Mecaniques, Cholet

Cartridge: 7.65mm Longue

Magazine capacity: 8 rounds

Overall length: 7.6 inches

Height: 4⁷/₈ inches

Barrel length: 4.3 inches

Weight: 26 ounces

Designed by Charles Gabriel Petter, the French military pistol of 1935 was chambered for an odd 7.65mm long cartridge that has not been commercially produced. The later model 1935-S is similar, but there are mechanical differences that preclude using these instructions for complete takedown.

Field Strip:



1. With the magazine removed and the hammer cocked, move the slide rearward about a quarter-inch, until the semi-circular cut in its lower edge aligns with the retaining tab on the slide latch. An easy way to do this is to exert leftward pressure on the slide latch shaft while moving the slide rearward. When it is free, remove the slide latch toward the left.



2. Move the slide and barrel assembly off the frame toward the front.



3. Lift the recoil spring unit at the rear until it is clear of the links, and remove it rearward. The spring unit can be taken apart by drifting out a vertical pin near the rear endpiece, but in normal takedown it is best left assembled. **CAUTION!** *Control the spring.*



4. Move the barrel slightly forward, lift it at the rear, and take it out rearward. The pivot that retains the links is heavily factory-riveted, and it is not removed in normal takedown.



5. Reinsert the magazine to cancel the magazine safety. Restrain the hammer, pull the trigger, and ease the hammer down to fired position. Remove the magazine. Pull upward on the hammer, and remove the sub-frame. If this unit is tightly fitted, it can also be pushed in the upper backstrap area.

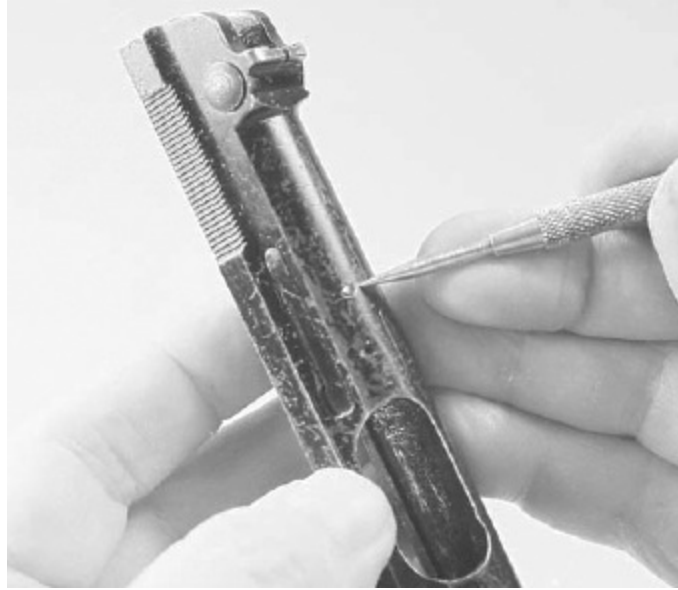


French Model 1935-A field-stripped

Detail Strip:



- 6.** Drifting out the cross-pin in the top of the slide will release the loaded-chamber indicator and its coil spring for removal.
- 7.**



Drift out the extractor pin upward, and remove the extractor and its coil spring.



- 8.** Turn the safety lever up to on-safe position. Use a tool to depress the firing pin until it stops, and hold it in that position. Push and pull the safety toward the left.



- 9.** Keep a finger over the rear of the slide to catch the firing pin as it emerges. Note that the safety has two detent balls, coil spring-powered. Normally, these are factory-staked in place, and they are not routinely removable. If the staking has worn, and they are loose, take care that they are not lost.



- 10.** Remove the firing pin and its return spring from the slide. The spring may or may not come out with the firing pin. You may have to extract it with a tool.



- 11.** The rear sight is integral with the slide. The front sight is dovetail-mounted, and can be drifted out toward the right.



- 12.** The hammer and sear cross-pins in the sub-frame are often heavily factory-staked in place, as they are in the example shown. If so, they should not be removed unless this is necessary for repair or refinishing. If this is done, drift out both pins, and the hammer and sear will come out of the sub-frame as a unit. The nut at the lower end of the hammer spring assembly can then be unscrewed. **CAUTION!** *Control the spring to separate the*

parts.



- 13.** Remove the four grip screws, and take off the grips. Note that each screw has a small bushing, and these may stay in the grip, or come off with the screw. Take care that these are not lost.



- 14.** Depending on the length of the magazine release cross-shaft, use either a regular screwdriver or one cut into a two-point wrench to unscrew and remove the magazine release button.



15. After the button is removed, take out the coil spring.



16. Remove the magazine catch toward the right.



17. Remove the retaining screw, and take off the magazine safety.



18. Drifting out the trigger pin toward the right will allow the trigger and the attached trigger bar to be taken out upward and toward the rear. Some damage of the factory-painted surface will be inevitable, so do this only for repair or refinishing. Drifting out the cross-pin in the trigger will allow removal of the trigger bar, and the spring. Control the spring.

Reassembly Tips: None necessary.

Galesi 25



Data: Galesi 25

Origin: Italy

Manufacturer: Industria Armi Galesi,
Collebeato (Brescia)

Cartridge: 25 ACP

Magazine capacity: 7 rounds

Overall length: $4\frac{9}{16}$ inches

Height: $3\frac{5}{16}$ inches

Barrel length: $2\frac{5}{16}$ inches

Weight: 12 ounces

In the days before 1968, when “Big Brother” decreed that we were to be denied access to neat little foreign pistols, the small Galesi automatics were a popular import. In addition to the 25, an identical pistol in 22 caliber was also offered. There was a very similar gun imported at the time which also bore the Galesi name, the Rino Galesi by Rigarmi, but that one was not up to the high quality of the Armi Galesi, and internally they were quite different.

Field Strip:



1. With the magazine removed, push the slide toward the rear until the safety cut in its lower edge aligns with the pivot point of the safety lever. Turn the safety-lever all the way around toward the rear, releasing the combination takedown-latch and striker spring base. If the base is tight and fails to move out, pull back the slide to apply pressure from the striker spring.



2. Move the slide about $\frac{1}{8}$ -inch to the rear of its normal closed position, and lift it up at the rear to clear the top of the barrel. Run the slide forward off the barrel and frame.



3. Remove the striker (firing pin), striker spring, and spring guide from the rear of the slide. Remove the recoil spring from the barrel. **Gun is now field-stripped.**



Galesi 25 field-stripped

Detail Strip:



- 4.** Drifting out the vertical pin in the slide will release the extractor and its spring for removal.



- 5.** With a small tool, lift the trigger bar from its long recess on the left side of the frame, and remove it.



6. The trigger and its spring are retained by a cross-pin and removal is by turning the trigger down and forward into the interior of the guard. The barrel is also cross-pinned in place, and routine removal is not advisable.



7. The small pin at the upper rear of the frame is the sear limit pin. It holds no part, but must be taken out if the sear, safety spring and plunger are to be removed. The other pin at the top of the frame is drifted out to release the sear and disconnecter. Note the relationship of these parts as they are taken out of the frame, to make reassembly easier. The small pin at the rear center of the grip frame, near the grip screw hole, retains the twin-bladed spring which powers the sear and disconnecter. To remove the safety, turn it straight down and pull it out toward the left. To remove the striker spring base, depress the safety spring plunger by inserting a tool through the safety shaft hole, and pull the base out toward the rear. After the sear, disconnecter, and sear limit pin are removed, the safety plunger and spring can be lifted out the top of the frame.



8. The lower of the two pins at the bottom rear of the grip frame is the magazine catch limit pin, which the upper pin is the magazine catch pivot. Drifting these out will release the magazine catch. The lower end of the sear/disconnector spring powers the magazine catch.

Reassembly Tips:

When replacing the combination spring which powers the sear, disconnector, and magazine catch, be sure that its ends are against the front surfaces of these parts.

When replacing the striker spring base and the safety, depress the safety spring and plunger by inserting a small tool into the safety shaft hole on the right side and levering the plunger downward.

Glock 17

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Glock 17 also apply to the following guns:

Glock 17L

Glock 21

Glock 6

Glock 30

Glock 19

Glock 22

Glock 27

Glock 20

Glock 23

Glock 29



Data: Glock 17

Origin: Austria
Manufacturer: Glock GmbH,
Deutsche-Wagram
Cartridge: 9mm Luger
Magazine capacity: 17 rounds
Overall length: $8\frac{1}{8}$ inches
Height: $5\frac{5}{16}$ inches
Barrel length: $4\frac{1}{2}$ inches
Weight: 23.13 ounces

Adopted by the military forces of Austria in 1983 as a standard sidearm, the Glock is notable for having its entire lower frame made of modern thermoplastic, with steel inserts where needed. It was not the first gun to have this type of construction, but it was the first of its type to enjoy commercial success. It has an odd trigger system and other unique features. There are now numerous versions, in several chamberings and sizes. They are mechanically the same.

Field Strip:



1. With the magazine removed and the striker in fired position, retract the slide slightly and pull down on the serrated tabs of the takedown-latch, located on each side above the trigger opening. Don't pull the slide too far, or the trigger will engage the striker. The slide can't be removed with the gun cocked.



2. Move the slide and barrel assembly forward off the frame.



3. Move the barrel slightly forward, and remove it from the underside of the slide. **Gun is now field-stripped.**

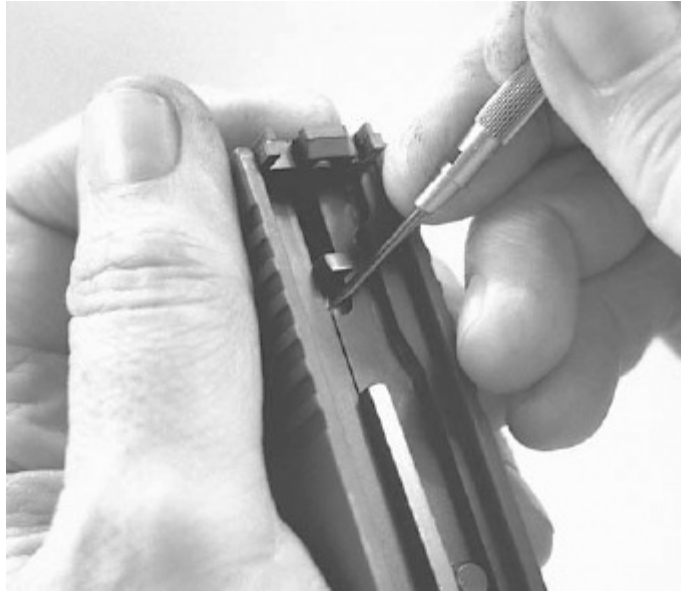


4. Disengage the recoil spring guide from the underlug of the barrel, and remove the guide and spring. **CAUTION:** *The spring is under tension, so control it.*



Glock 17 field-stripped

Detail Strip:



5. With a small tool, depress the striker sleeve toward the front, and move the slide endpiece downward. **CAUTION:** *The striker spring and extractor spring are under tension.*



6. Remove the striker and its sleeve and spring toward the rear.



7. The striker assembly can be disassembled by drawing the spring back and separating the two halves of the small collar at the front.



8. Remove the extractor spring and plunger system toward the rear.



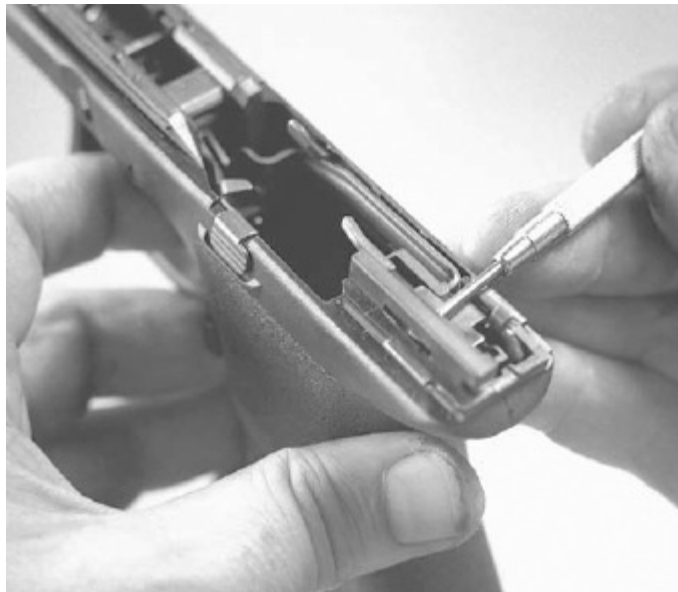
- 9.** Depress the firing pin lock on the underside of the slide, and remove the extractor toward the right.



- 10.** Remove the firing pin lock and its spring from the underside of the slide.



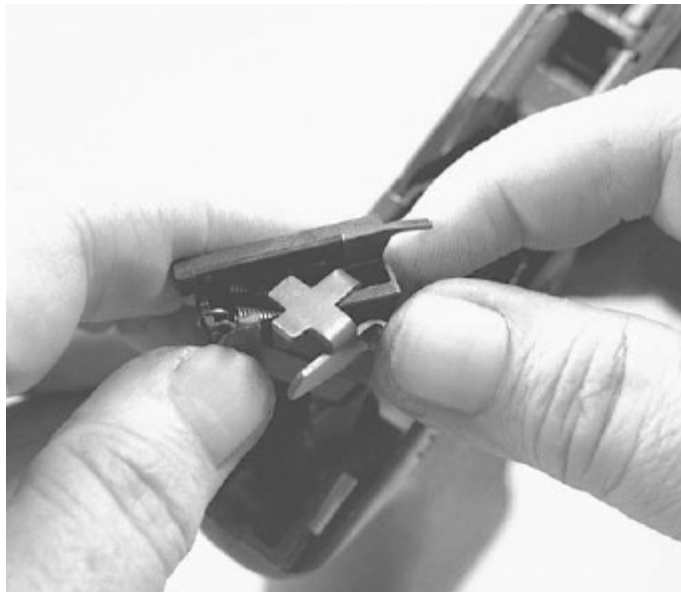
11. Push out the cross-pin at the rear of the grip frame.



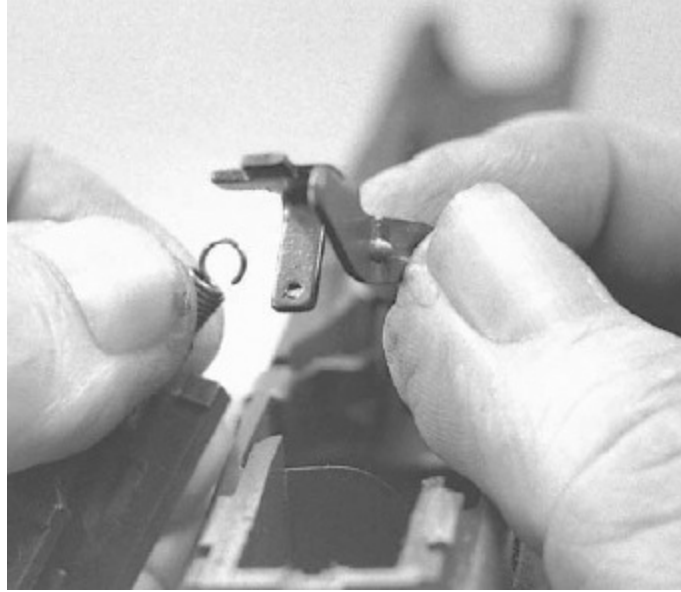
12. Use the right and then the left slide rail as bases to gently pry the sub-frame upward.



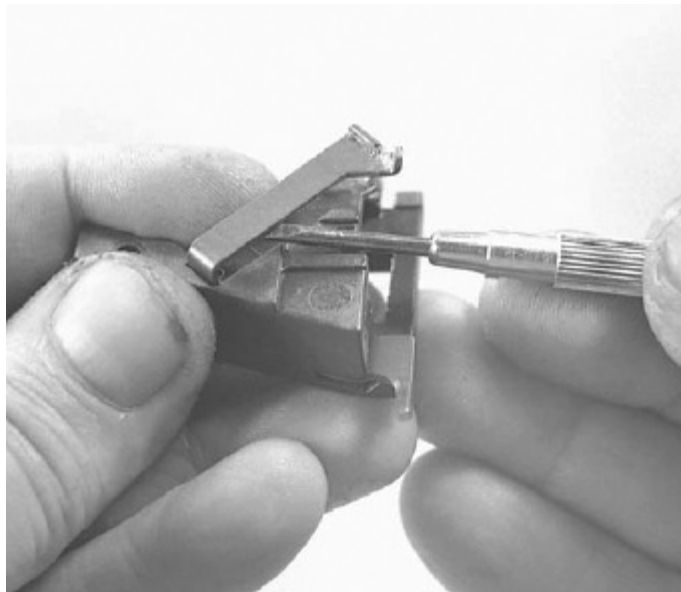
- 13.** Move the sear unit upward out of the frame. Note that it is attached to the trigger bar.



- 14.** Move the sub-frame rearward and turn it toward the left to disengage the left tab of the trigger bar from its slot, as shown.



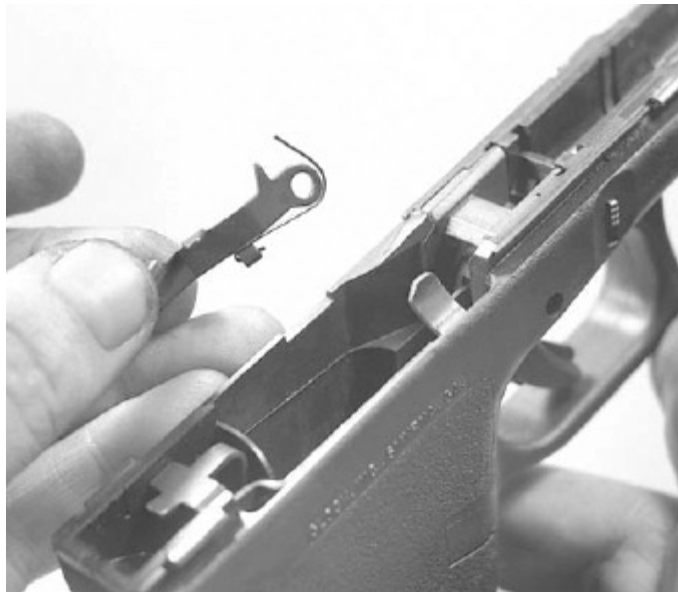
15. The trigger bar spring is easily unhooked from its hole in the underside of the bar.



16. The disconnecter is easily pried out of its recess in the sub-frame.



17. Drive out the trigger cross-pin toward either side.



18. Remove the slide latch and its attached spring upward and toward the rear.



19. Move the trigger assembly toward the rear, and remove it upward.



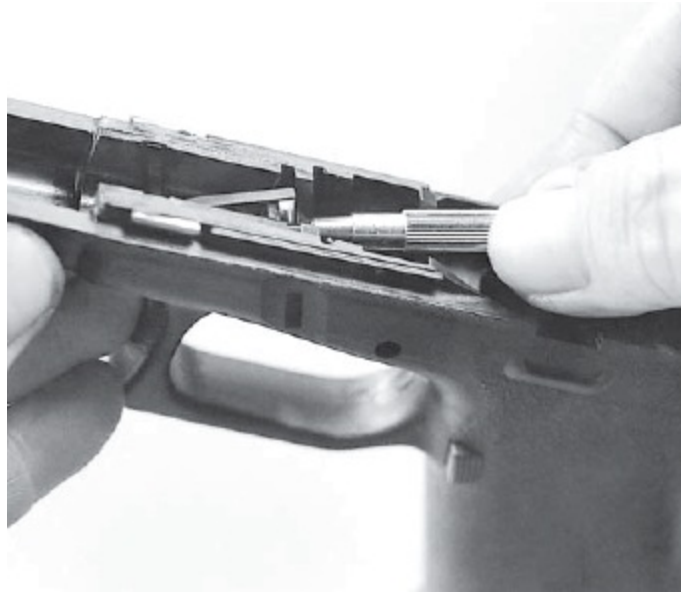
20. The trigger safety and the bar are both pivoted and retained in the trigger by blind pins. Routine disassembly is not possible.



- 21.** Insert a small tool to depress the blade spring that powers and retains the takedown-latch. The latch can then be taken out toward either side.



- 22.** The barrel locking block can be pried gently upward and removed.

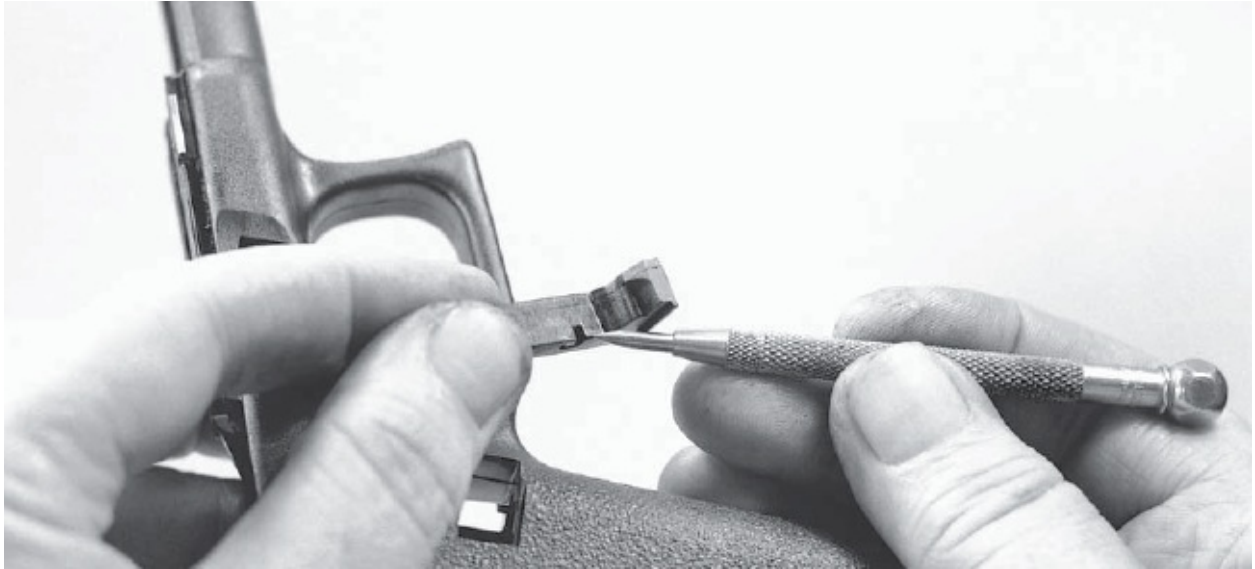


- 23.** Inserting a slim tool at the bend in the takedown-latch spring will allow it to be pried upward and removed.



- 24.** Insert a tool into the magazine well to tip the upper end of the magazine catch spring toward the right until it aligns with the exit cut in the lower edge of the catch, then move it rearward out of the cut and let it spring back toward the left. The magazine catch is then taken out toward the right. If necessary, the spring can be gripped and pulled out of its mounting hole upward.

Reassembly Tips:



1. When replacing the magazine catch, it is necessary to insert a tool to hold the tip of the spring out of the way as the catch is reinserted. Then, the tip of the spring must be moved back into the notch in the catch.



- 2.** When replacing the takedown-latch, note that it has a groove in its upper projection. This groove must be oriented toward the rear.

H&R 32 Self-Loading



Data: H & R Self -Loading

Origin: United States

Manufacturer: Harrington & Richardson,
Worcester, Massachusetts

Cartridge: 32 Auto

Magazine capacity: 8 rounds

Overall length: 6.37 inches

Height: 4.56 inches

Barrel length: 3¹/₂ inches

Weight: 22 ounces

The H & R pistols were based on the designs of William J. Whiting, which were made in England as the Webley automatics. H & R designers made several changes in their versions. Between 1912 and 1916 they produced a 25 Auto pistol that is mechanically quite different from the 32 covered here. The 32 was made from 1916 to 1924, in a quantity of 34,500.

Field Strip:



1. With the striker in fired position and the magazine removed, pull

down the front of the trigger guard until the “step” can be seen, and hold it there.

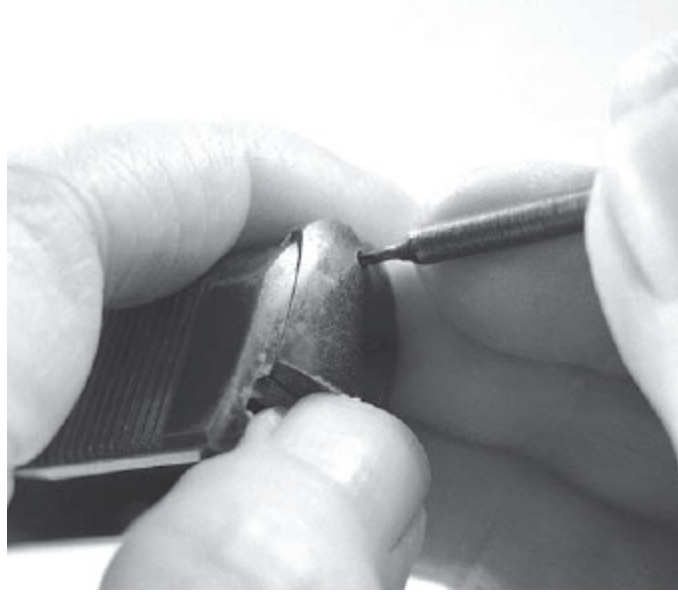


- 2.** Move the slide and barrel off the frame toward the front. As it clears its track, the barrel will be released for removal.



H&R 32 Self-Loading field-stripped

Detail Strip:



- 3.** In the aperture at the top of the slide backplate, use a small tool to depress the plunger of the backplate catch. Move the backplate upward for removal. **CAUTION!** *Restrain the recoil spring and striker spring base, as the powerful springs will force it rearward.*



- 4.** Ease out the spring base, and remove the base and springs.



5. The recoil spring and guide, and the striker spring, are easily detached. The guide for the striker spring is integral with the base.

H&R SL:



6. The backplate lock plunger and its coil spring are easily taken out of the slide. It may be wise to remove them at this point, to

prevent loss.



7. Remove the striker from the slide.



8. Drift out the breechblock retaining pin.



- 9.** The breechblock will often be quite tightly fitted. Insert a drift punch in the firing pin aperture in the breech face, and tap it gently to nudge the breechblock downward.



- 10.** Remove the breechblock. The extractor and its coil spring can be lifted out of the breechblock. The loaded-chamber indicator pin is integral with the extractor.



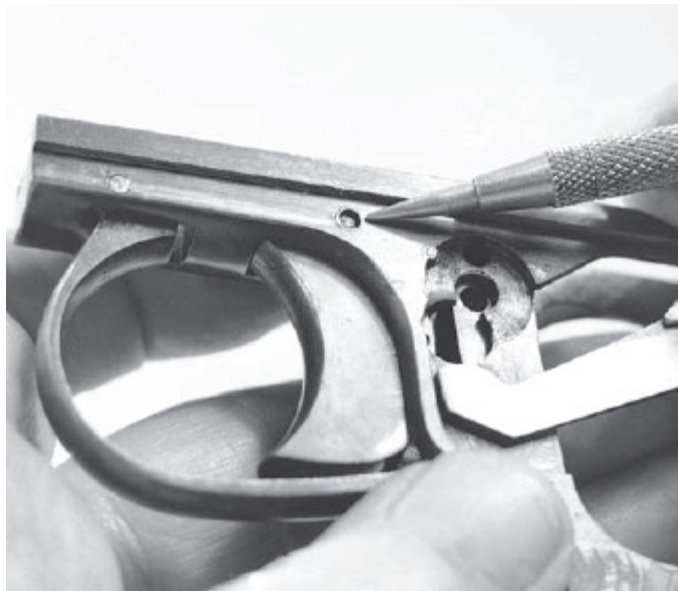
- 11.** Set the safety lever in off-safe position (upward), remove the left grip screw, and move the grip panel slightly downward as it is taken off. Be careful, as the upper front of the grip is easily broken. Remove the right grip screw and the right panel. Remove the safety lever retaining screw.



- 12.** Remove the safety lever toward the left. The safety detent plunger and spring are now taken out of the frame.



- 13.** There is a small aperture on the right side of the frame for insertion of a drift punch. Use it to drift out the sear bar contact pin, shown here, toward the left.



- 14.** Drift out the trigger cross-pin.



15. Remove the trigger, and its plunger and spring.



16. Remove the trigger guard. The lock pin at the front of the frame need not be taken out.



17. Remove the sear bar.



18. Drift out the grip safety cross-pin.



19. Drift out the grip safety limit pin.



20. Move the grip safety unit forward, then take it out toward the rear. The sear plunger and spring can be removed from the top of the unit.



- 21.** The sear lever and its plunger and spring can be separated from the grip safety by drifting out this cross-pin. Caution: Control the plunger and spring.



- 22.** Drift out the sear pin, and remove the sear. The sear limit pin, just to the rear, does not have to be removed.



23. Drift out the magazine catch cross-pin.



24. Fully depress the catch button, and remove the magazine catch toward the rear.



25. Remove the magazine catch button.

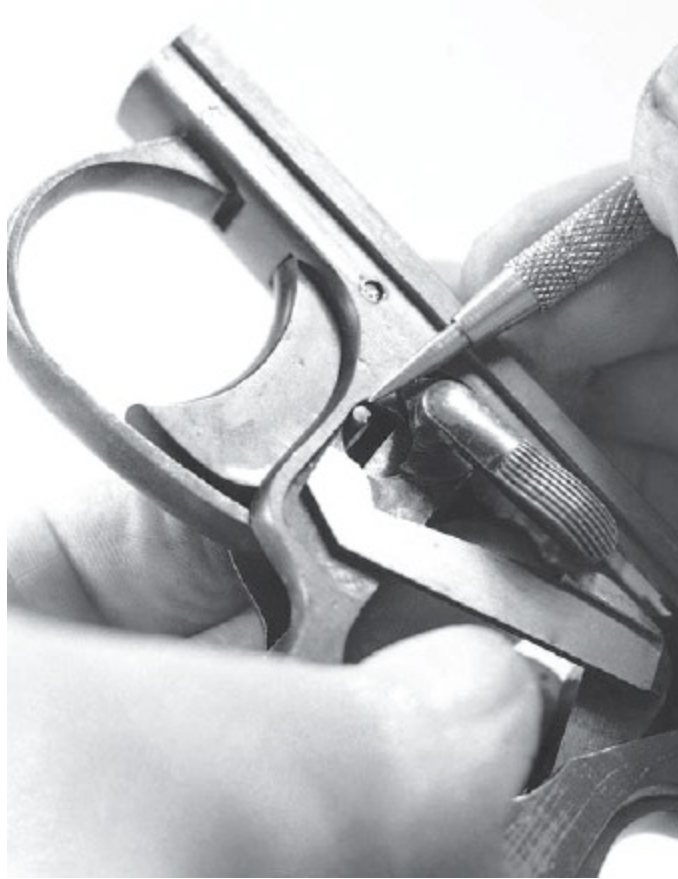


26. Remove the magazine catch spring.

Reassembly Tips:



- 1.** When re-installing the trigger, insert a tool to ensure that the plunger and spring are bearing properly on the rear upright of the guard.



2. When the sear bar contact pin is driven in, be sure it is even with the frame surface, as shown.

Heckler & Koch P7

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Heckler & Koch P7 also apply to the following guns:

Heckler & Koch P7M8

Heckler & Koch P7M13



Data: Heckler & Koch P7

Origin: West Germany

Manufacturer: Heckler & Koch GmbH
Orberndorf/Neckar

Cartridge: 9mm Luger

Magazine capacity: 8 rounds

Overall length: 6.54 inches

Height: 5 inches

Barrel length: 4.13 inches

Weight: 30.5 ounces

One of the smallest pistols made for the 9mm Luger round, the P7 was originally called the “PSP,” but received its numerical designation in the West German police trials. Notable for its gas-locked breech and squeeze-cocking operation, it is a fine choice for a back-up piece. Flat and concealable, it is never cocked until the squeeze-lever is fully depressed, and is instantly uncocked when the lever is released. Later versions, the P7M8 and P7M13, have a different magazine release. It is not complicated, and should cause no takedown difficulty. Otherwise, the same instructions will apply.

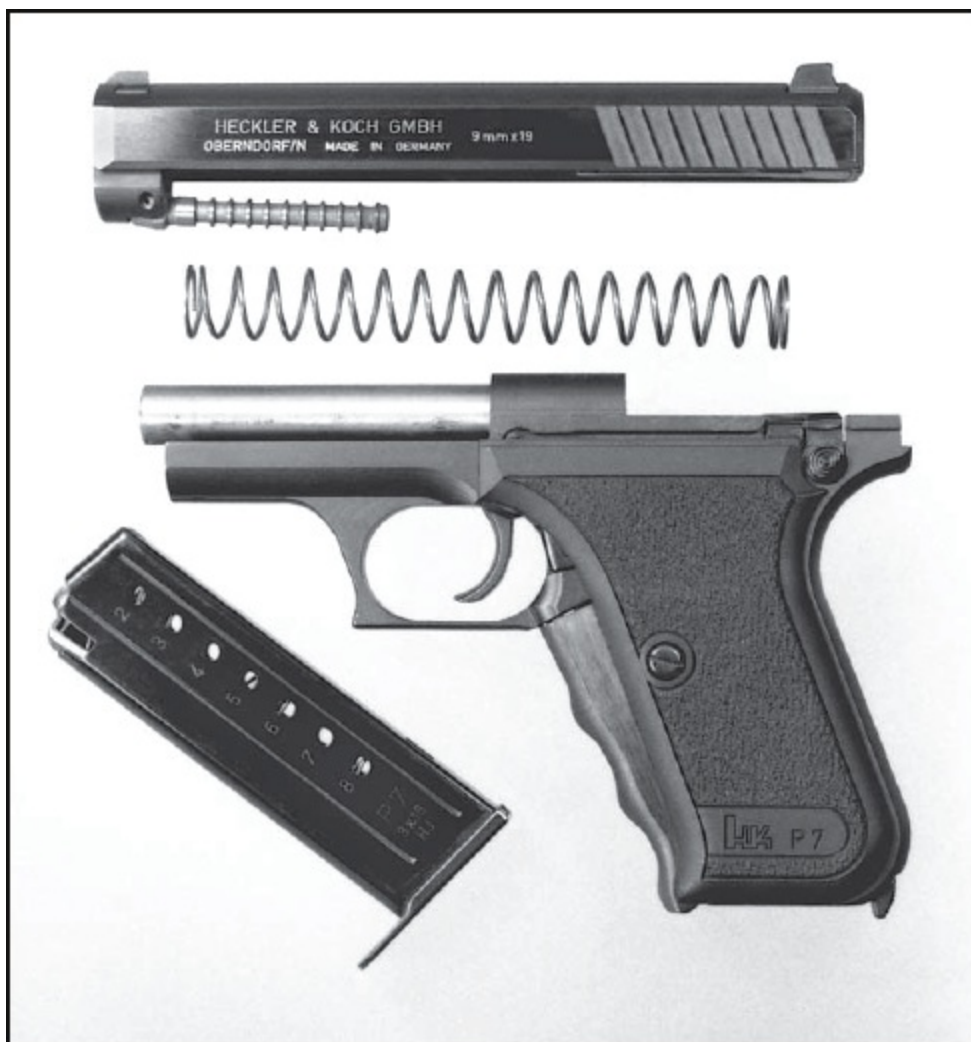
Field Strip:



- 1.** Remove the magazine, and depress the takedown button. Move the slide about $\frac{1}{2}$ -inch toward the rear, and lift the rear of the slide upward.

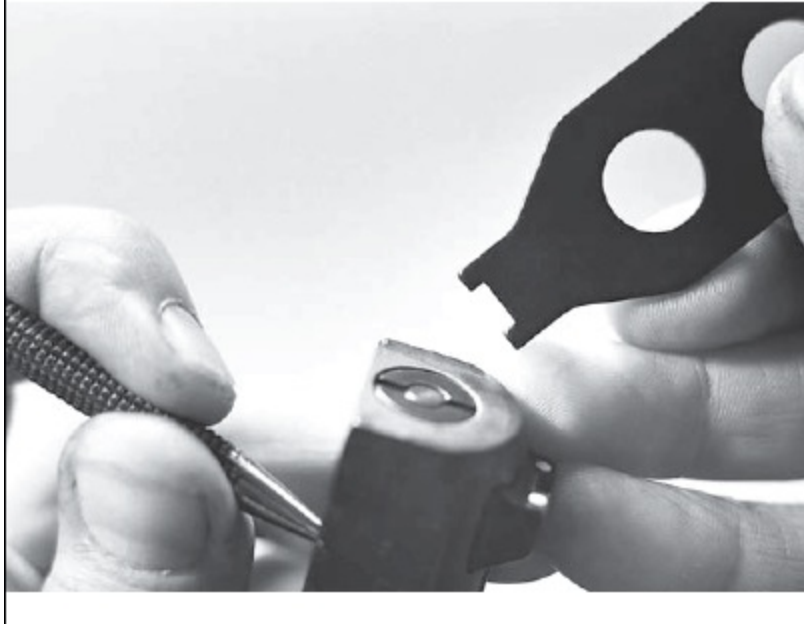


2. Remove the slide assembly toward the front. Remove the recoil spring from the barrel. **Gun is now field-stripped.**



Heckler & Koch P7 field-stripped

Detail Strip:



- 3.** Removal of the firing pin assembly is easily done with the slide in place, before field-stripping, as the squeeze-cocking lever can be used to move the firing pin (striker). With the slide removed, it is necessary to insert a tool to engage the firing pin lug, moving the pin back until its head is even with the rear of the slide. Holding it in this position, use the tool supplied with the gun to engage the slots in the retainer.



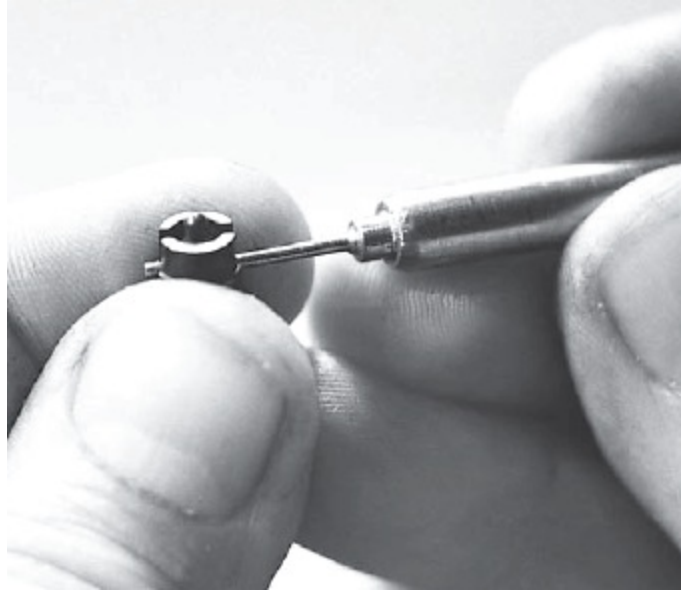
4. Depress the firing pin retainer and turn it 90 degrees to the right (clockwise, rear view).



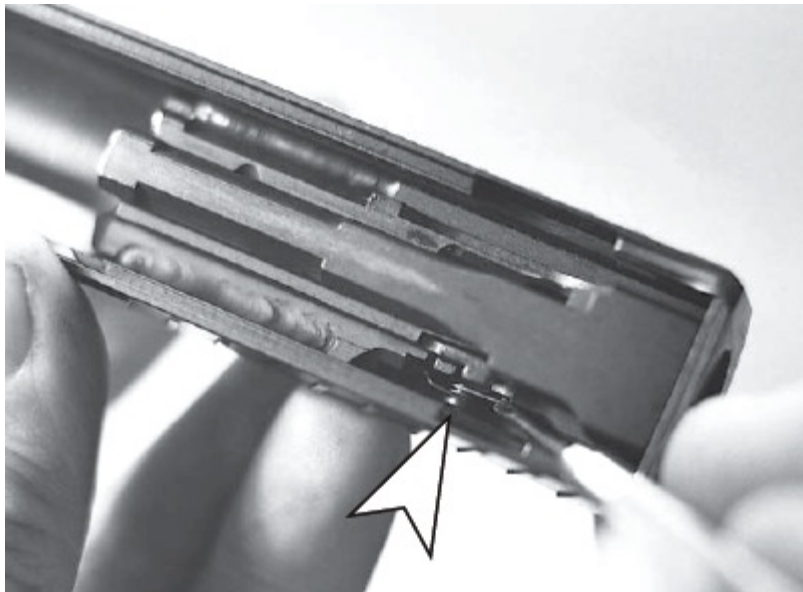
5. Remove the firing pin assembly toward the rear.



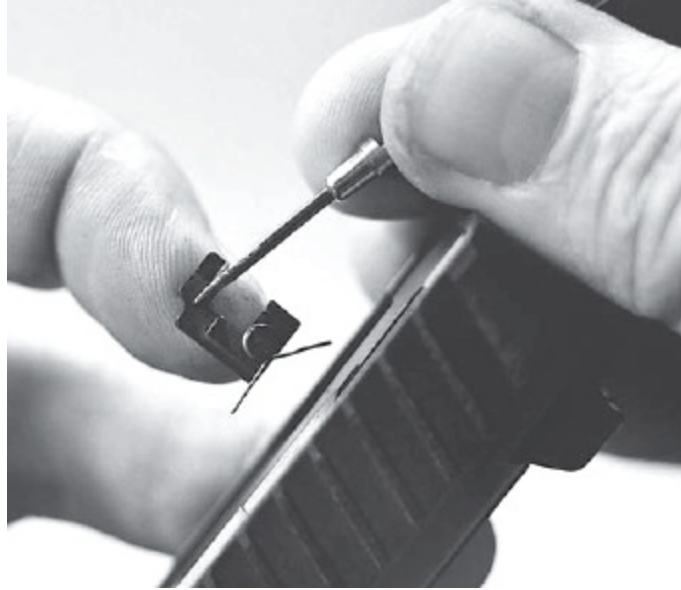
6. Grip the front spring collar and turn the firing pin lug out of its recess in the retainer, then remove the retainer toward the rear.



7. Restrain the spring collar, and push out the small cross-pin at the front of the firing pin. **CAUTION:** *The spring is under tension, so control it.* Take care that the tiny pin is not lost, and remove the collar and spring from the front of the firing pin.



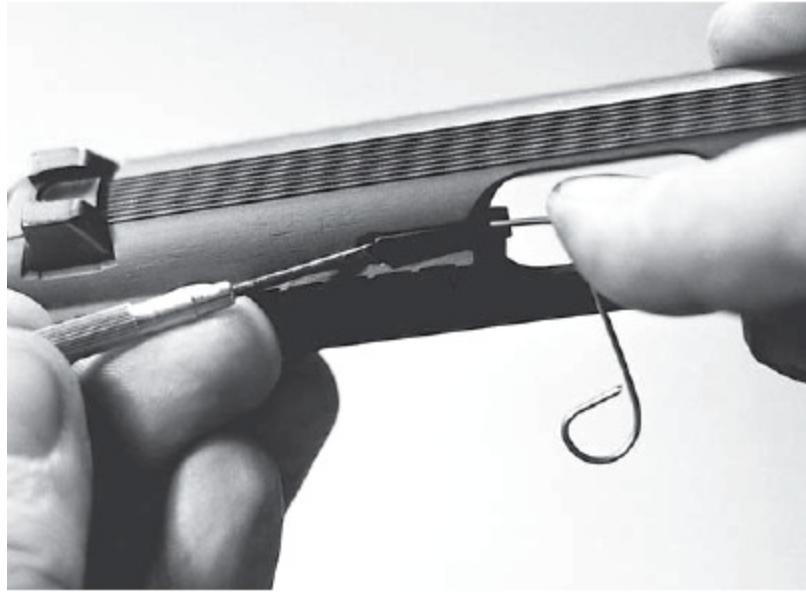
8. Insert a small screwdriver into the underside of the slide at the right rear, and trip the rear arm of the firing pin block spring from its shelf (arrow) toward the front.



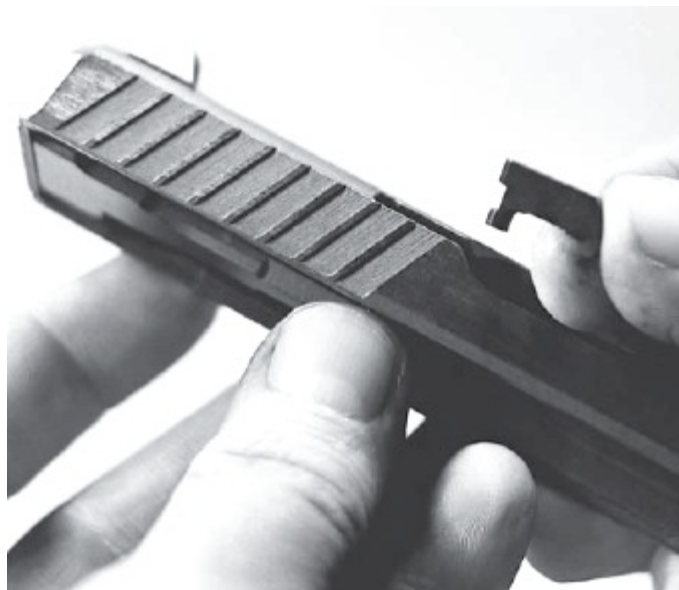
- 9.** Remove the firing pin block and its spring from the bottom of the slide. This is a captive spring, so there is no danger of loss.



- 10.** Removal of the extractor requires a tool made of spring wire, about .040-inch diameter. Insert the tool at the front of the extractor, in the groove provided, and compress the extractor plunger and spring toward the rear.



- 11.** As the plunger is depressed, the rear of the extractor will move slightly outward. Keeping pressure on the plunger, use a small screwdriver at the rear to tip the extractor out of its recess.
CAUTION: *The plunger and spring will be released as the extractor clears, so control them.*



- 12.** Remove the extractor, and take out the plunger and spring.



13. Drift out the roll cross-pin at the lower front of the slide.



14. Remove the gas piston from the slide, and take out the compression spring mounted inside it at the front.



- 15.** The reverse end of the firing pin tool is a screwdriver blade that fits the grip screws. After the screws are removed, lift each grip at the front, move it slightly forward, then lift it off.



- 16.** At the upper rear or lower front, detach one arm of the cocking-lever spring from its hook, and remove the spring.



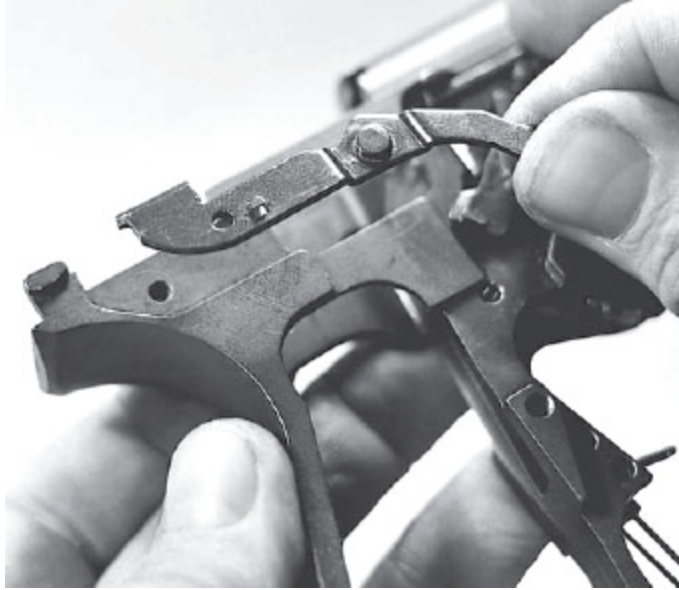
- 17.** Restrain the squeeze-cocking piece, and push out the pivot pin at the lower front of the grip frame toward either side.



18. Remove the squeeze-cocking piece toward the front.



19. Move the lower arms of the drag lever forward until they clear the frame, then turn the drag lever toward the left side, and remove it downward and toward the left.



20. The cocking-lever can now be removed from its recess on the right side.



21. If necessary, the spring which powers both the squeeze-cocking piece and the drag lever can be removed by drifting out its roll cross-pin at the front of the grip frame.



- 22.** Push the trigger cross-pin slightly toward the left, and the combination trigger and trigger bar spring will be released upward within its recess. Remove the spring upward and toward the right.



- 23.** Push the trigger pin out, move the trigger forward, and turn it around toward the left for removal. The trigger bar is easily separated from the trigger.



24. Remove the disconnector toward the right.



25. Detach the rear arm of the ejector/slide latch spring from its shelf on the rocker, and allow it to swing forward, relieving its tension. **CAUTION:** *Keep fingertips clear of the spring as it is released.*



- 26.** The two cross-pins having a wide flat head on the left are split and tempered on the right, locking them in place. Removal will require a shop-made tool of the same diameter, with a V-cut at its end to compress the end-leaves of the pin. Using a regular drift punch on these pins can break them. With the special tool, start the ejector/slide latch spring pin toward the left.



- 27.** Move the ejector/slide latch off its post at the front, move it toward the rear, and remove it.



28. Drift the spring post out toward the left, and remove the spring.



29. Drift out the rocker pivot pin, again using the special tool. During removal of this pin, restrain the cocking latch, located on the underside at the rear of the trigger guard, as it will also be released. Remove the rocker from its pin.



30. Remove the cocking latch and its spring downward.



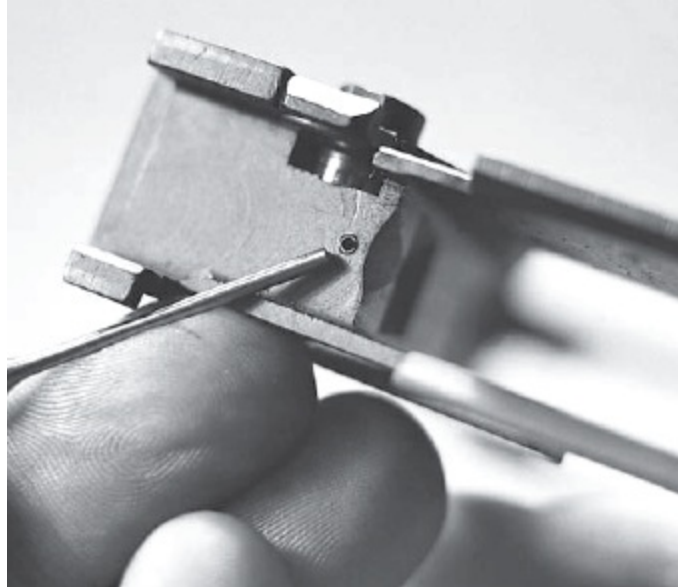
31. Tip the cocking-lever stop over forward, and remove it toward the front. Note that the lower roll pin on which the stop rests retains no part, and need not be removed.



32. Push out the magazine catch cross-pin.



33. Remove the magazine catch and its spring downward.



- 34.** The takedown-latch button and its spring are retained by a vertical roll pin at the top of the frame, and this pin is drifted out downward. The latch and its spring are removed toward the left. The cross-pin which pivots the ejector/slide latch and the disconnecter also internally retainss the barrel and gas cylinder. Removal of these parts is definitely not recommended.

Reassembly Tips:



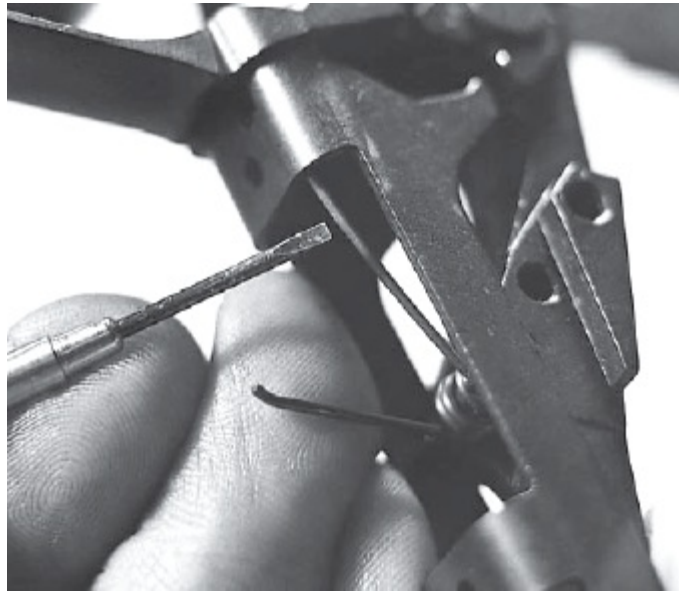
1. When replacing the cocking latch and the lever stop, set the latch in place, taking care that its spring is seated in its well in the frame. Insert a drift through the hole to temporarily hold it in place. Engage the lower tip of the stop with the roll pin, and swing the stop over toward the rear, depressing the latch to clear its step. Insert the cross-pin, and withdraw the drift.



2. When replacing the ejector/slide latch, be sure the upper arm of the spring engages its hook on the inside of the latch.



3. When replacing the trigger system, set the trigger and attached trigger bar in place, and push the cross-pin toward the left until its end is even with the frame. Insert the spring, and use a tool to push it downward and toward the rear until it aligns with the pin, then push the pin into place.



4. When replacing the drag lever and the squeeze-cocking piece, remember that the longer of the two spring arms powers the drag lever, and the shorter one powers the squeeze-cocking piece. During replacement of these parts, the cocking latch must be depressed upward. The pivot pin is more easily inserted with the levers in squeezed position.



- 5.** This photo shows the right side of the gun, with the parts in proper position.



6. This photo shows the left side of the gun, with the parts in proper position.



7. When replacing the piston, note that the cross-opening in its forward end is irregularly shaped. The piston must be installed as shown. During reseating of the roll pin, insert a drift to prevent deformation of the compression spring.



8. When replacing the extractor, use a nylon drift punch to push the

extractor toward the rear, while restraining and guiding the extractor with the thumb.

When replacing the firing pin assembly, simply insert it into the rear of the slide, and turn the retainer until its slot is in vertical position.

Heckler & Koch USP Compact

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Heckler & Koch USP Compact also apply to the following guns:

Heckler & Koch USP

Heckler & Koch USP 45 Tactical

Heckler & Koch USP 45

Heckler & Koch USP 45 Match

Heckler & Koch USP 45C



Data: Heckler & Koch USP
Compact

Origin: Germany

Manufacturer: Heckler & Koch,
Oberndorf/Neckar

Cartridge: 40 S&W Auto

Magazine capacity: 10 rounds

Overall length: 6.81 inches

Height: 5 inches

Barrel length: 3.58 inches

Weight: 27.51 ounces

The Compact version of the H&K USP is also offered in 9mm Luger and 45 ACP chamberings. Several feature variations are available, but none of these should cause any problems in takedown and reassembly.

Field Strip:



1. With the hammer cocked and the magazine removed, move the slide rearward until the cut in its lower edge aligns with the front of the slide latch, and push the slide latch out toward the

left for removal.



2. Move the slide and barrel assembly off the frame toward the front.



3. Lift the recoil spring unit away from the barrel at the rear, and remove it rearward. The unit may be disassembled by removing the C-clip at the front of the guide. **CAUTION!** *Control the spring, but in normal takedown this is not done.*

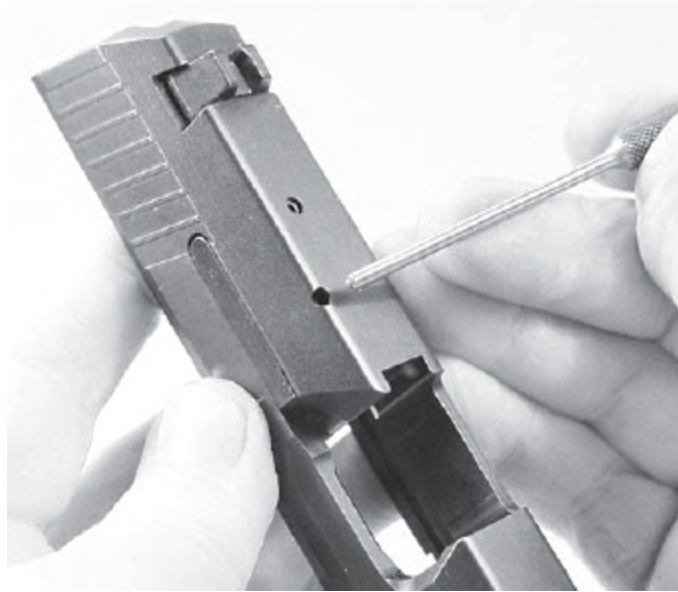


4. Move the barrel slightly forward to clear the extractor, and tip it outward at the rear for removal.

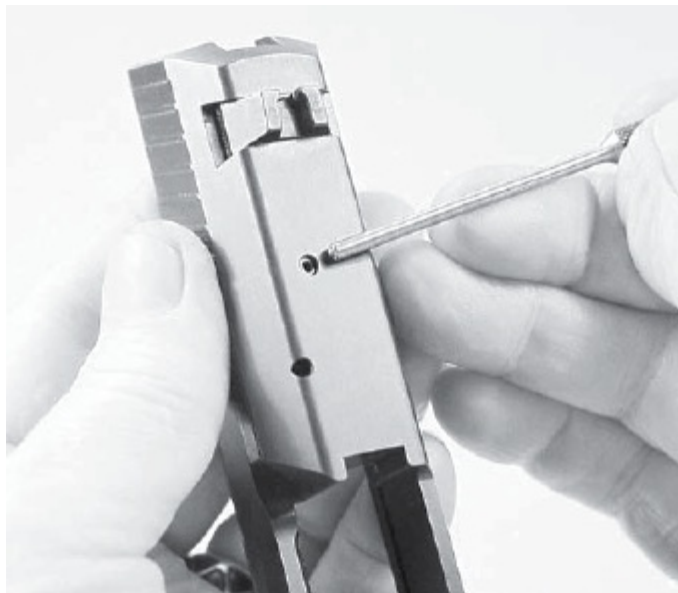


Heckler & Koch USP Compact field-stripped

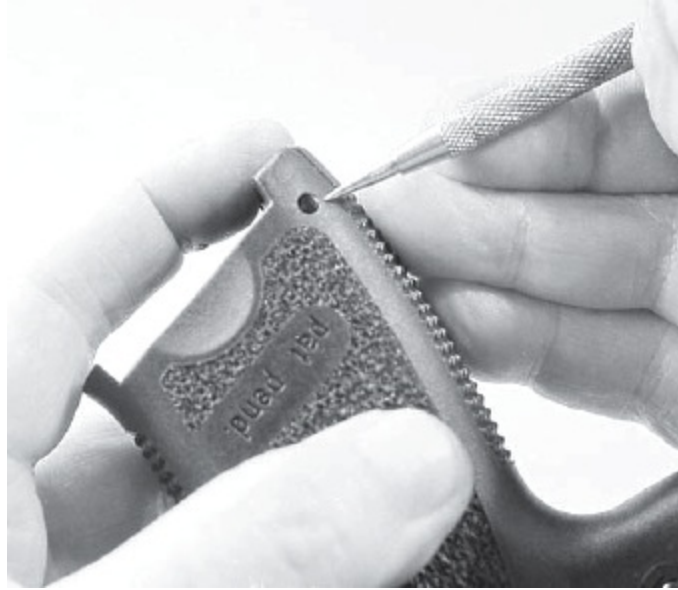
Detail Strip:



5. With a roll-pin punch of the proper dimensions, as shown, drifting out the extractor pin will allow removal of the extractor, its spring, and a small rubber spring plug.



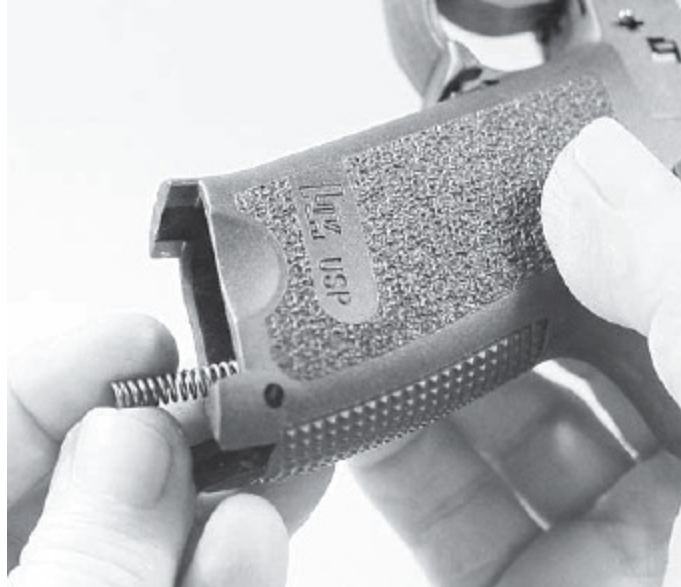
6. The same roll-pin punch is used to drift out the firing pin retaining pin. The firing pin and its return spring are then removed rearward, and the firing pin block and its spring are removed from the underside of the slide. Both of the sights are dovetail-mounted, and can be drifted out.



7. Restrain the hammer, pull the trigger, and lower the hammer to fired position. Exert upward pressure on the insert at the lower rear of the grip frame, and push out the cross-pin. **CAUTION!** *The tension of the hammer spring will be relaxed, so keep a firm grip on the insert.*



8. Ease the spring tension slowly, and remove the insert.



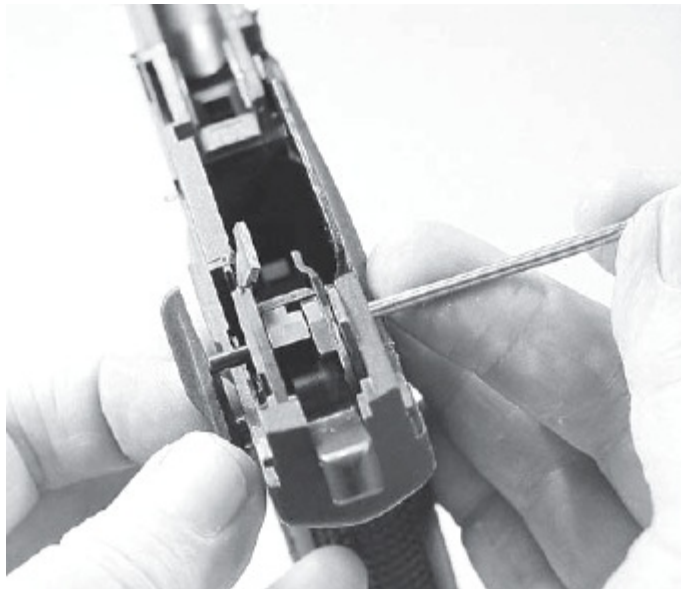
- 9.** Remove the hammer spring. The hammer strut is not removed at this point.



- 10.** Restrain the safety detent plate, and push the sear pin toward the right until it is level with the side of the frame. Control the plate.



11. Ease the detent plate upward, and remove it.



12. Turn the safety lever up to the position shown, and move it very slightly to the left. Push the sear pin to the left until it just touches the safety lever.



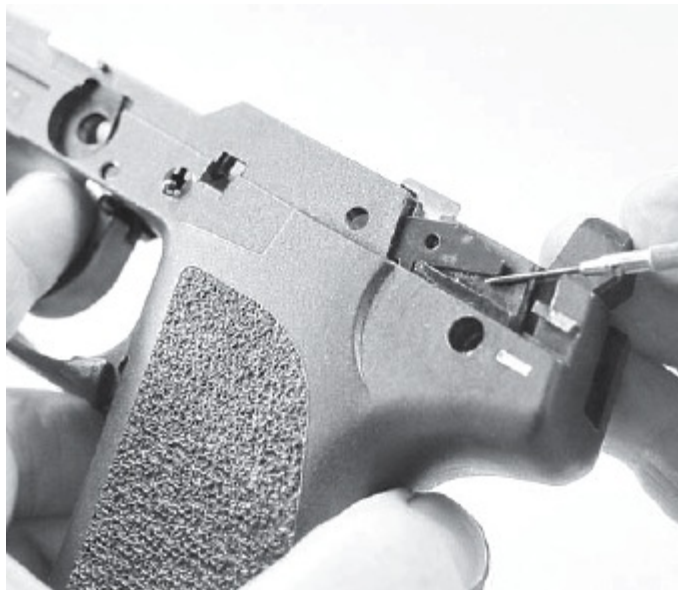
13. Remove the disconnecter.



14. Turn the safety over until it points to the rear. Pull the trigger and hold it to the rear. Move the safety toward the left until it stops.



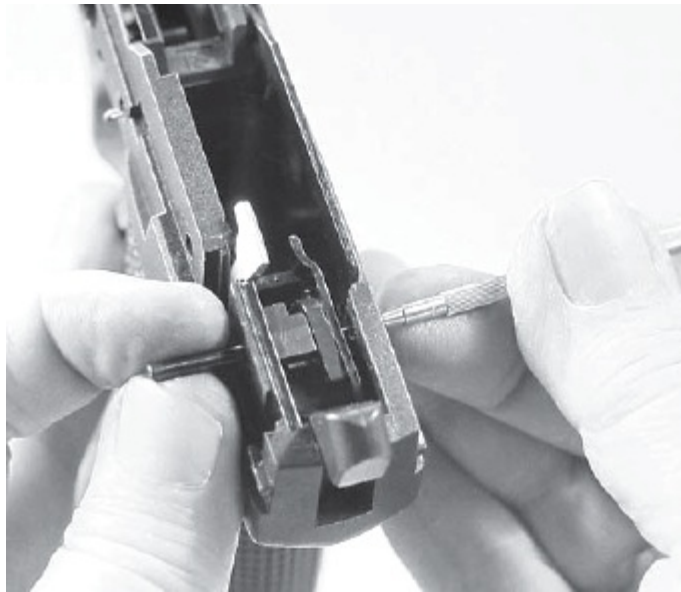
- 16.** Insert a very slim tool just forward of the safety to push down and hold the safety detent, and remove the safety toward the left.



- 15.** Lift the safety detent with the same slim tool, and take it out upward.



17. Remove the safety detent spring.



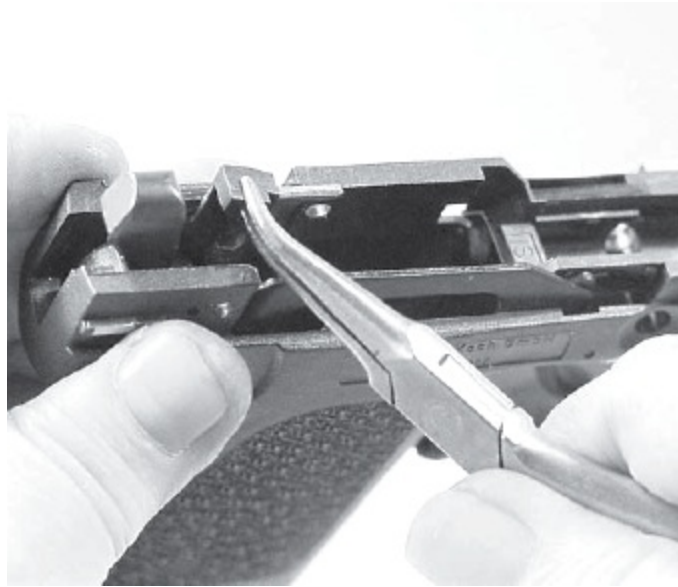
18. Push out and remove the sear pin.



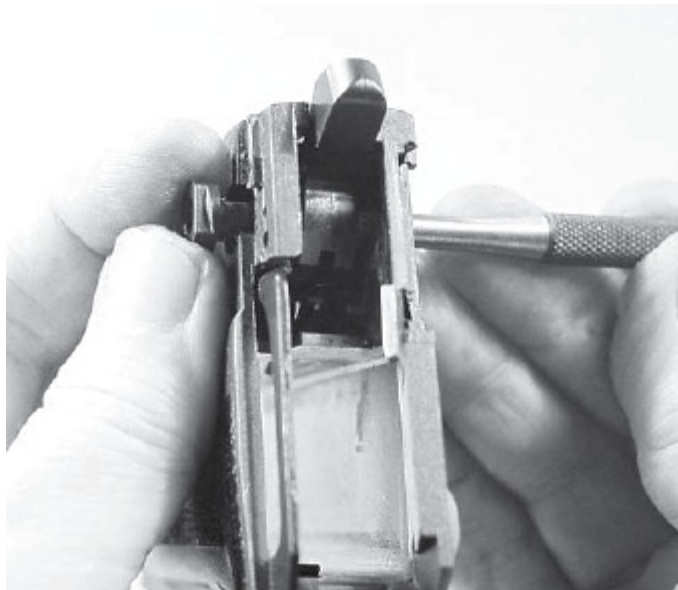
19. Tip the firing pin block lifter over toward the front, and take it out.



20. Tip the hammer back, and lift out the secondary sear.



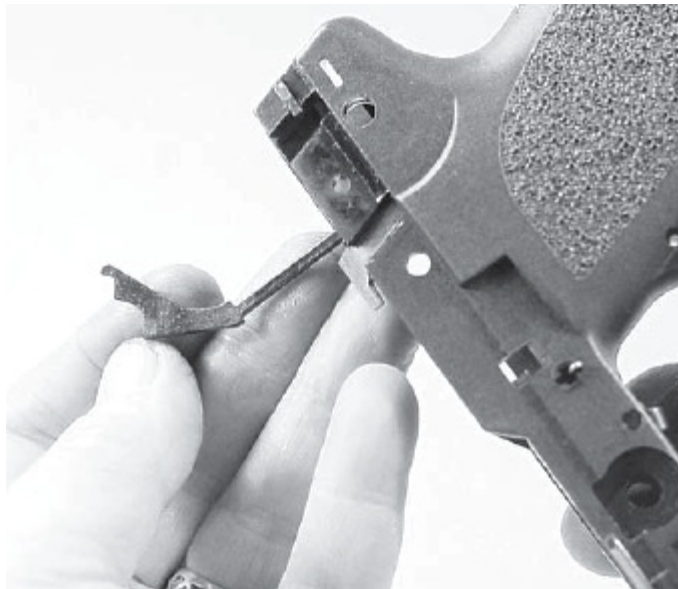
- 21.** Remove the main sear upward. There will be slight resistance from the sear spring.



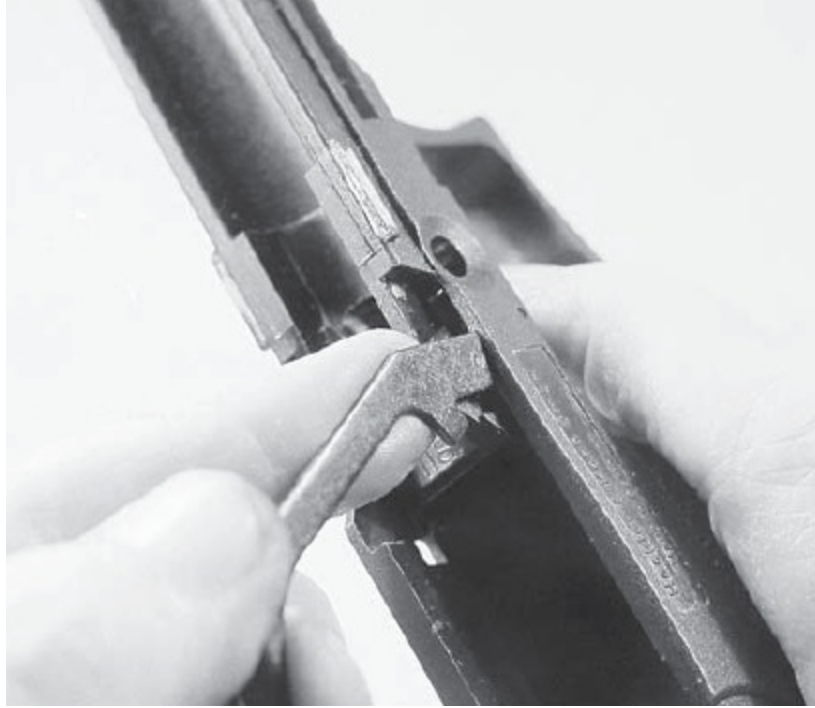
- 22.** Into the safety opening on the left side, insert a drift of exactly 7/32 diameter, and push the hammer axle toward the right.



24. Remove the hammer.



23. Remove the hammer strut.



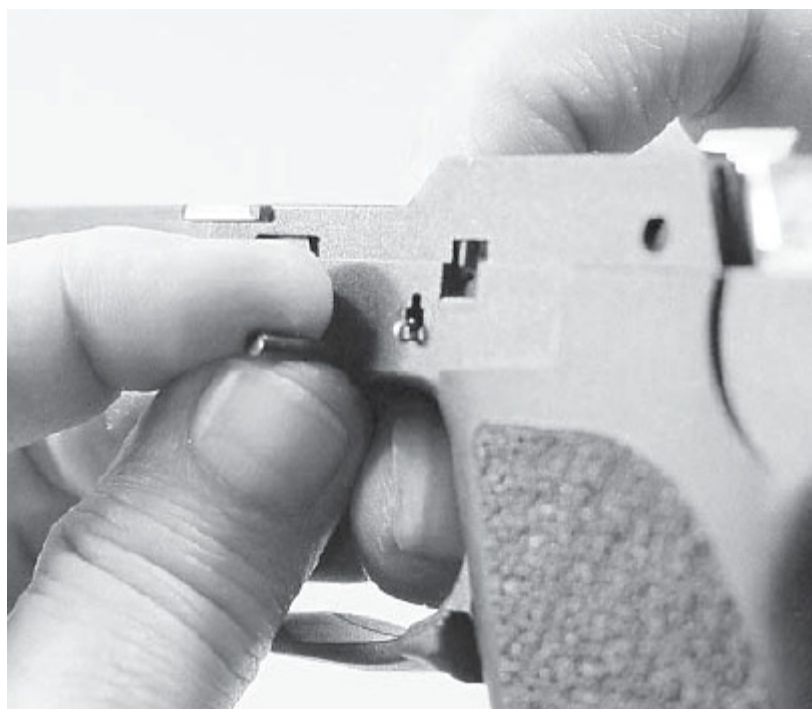
- 25.** Turn the trigger bar up to the position shown, and pull the trigger slightly to align its pivot with an exit cut in the frame. Tilt the bar, and take it off.



26. Lift out the trigger bar plunger and spring.



27. Push the trigger pin toward the left until it can be grasped for removal.



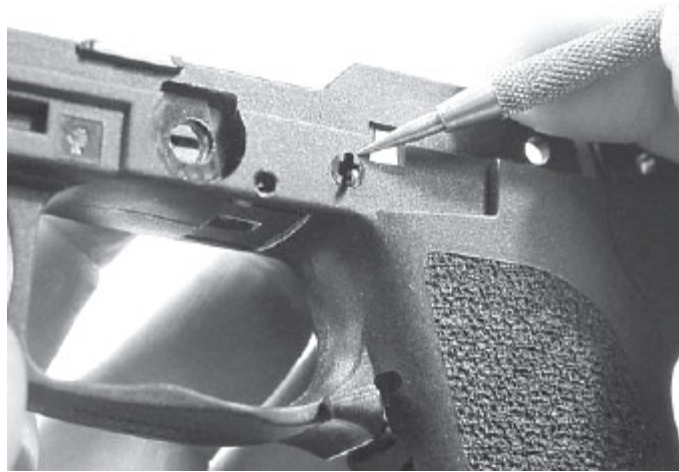
- 28.** As the pin is taken out, keep a finger and thumb inside the frame and the trigger guard to arrest the trigger spring. It will be released as the pin clears.



- 29.** Remove the trigger spring.



30. Turn the trigger downward into the guard space for removal.



31. If necessary for repair, a sharp tool can be used to flex the upper arm of the slide latch spring out of its recess, and the spring can then be taken out toward the left.

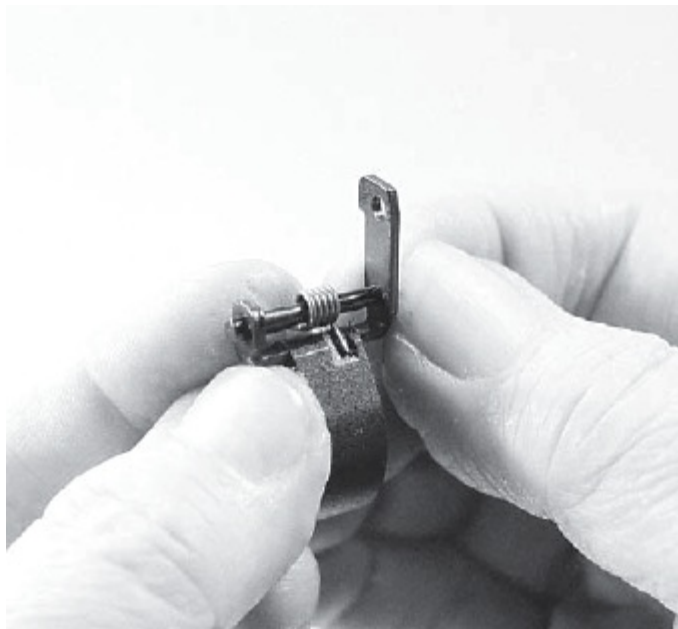


32. The same roll-pin punch used for the extractor and firing pin retaining pins is used to drift out the magazine catch pin. The catch and its coil spring are then taken out downward and forward. Control the strong spring.

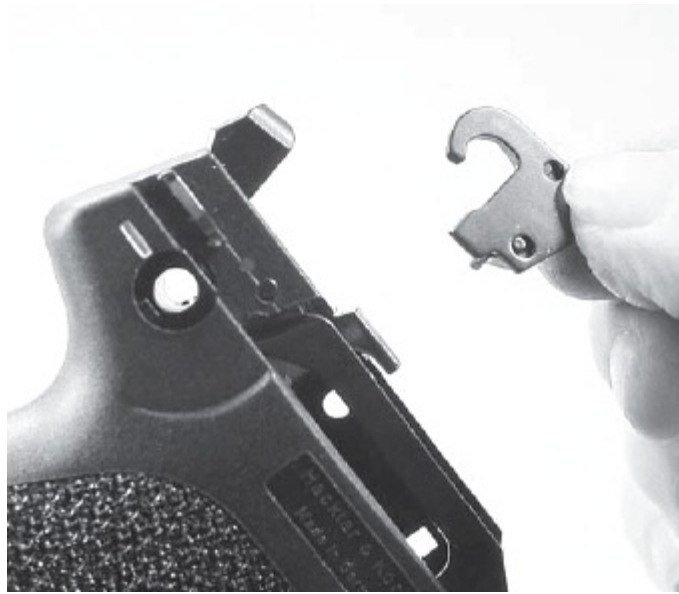


- 33.** The ejector is moulded in place in the polymer frame, and it is not routinely removed. Inside the frame (photograph not possible), the twin-armed spring that powers the sears is locked in its slot by a spring tab at its lower end. This is accessible inside at the back of the magazine well, from below. After release, the spring is pushed out upward. Except for repair, it is best to leave it in place.

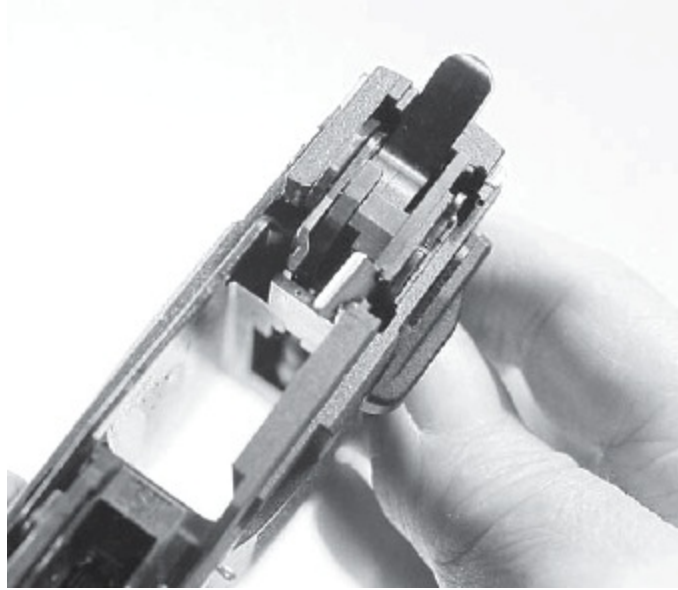
Reassembly Tips:



1. For illustration purposes only, the trigger, trigger pin, and trigger spring are shown here in their assembled relationship. Because of the shape of the trigger, with its separate “wings,” a slave pin can’t be used in the trigger to aid reassembly. Instead, make a slave pin that will span only the central portion of the trigger area in the frame. Because the hole on the right side of the frame is smaller than the trigger pin, the slave pin must be small enough to pass through the hole, and its right end must be sharply tapered. With the slave pin holding the spring, the trigger is put into position, and the pin is pushed through.



2. The secondary sear and the firing pin block lifter have an interconnection near their lower edges, and it may be easier to install them together. The sear pin is pushed back toward the right in increments, as the parts are put in. Note that both arms of the sear spring go in front of the parts.



3. Here is a view of the top of the frame at the rear, showing all of the parts properly installed. Remember that the sear cross-pin must protrude very slightly on the left side, to mate with the track in the safety detent plate.

Hi-Point Model C9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Hi-Point Model C9 also apply to the following guns:

Most other Hi-Point models



Data: Hi-Point C9

Origin: United States

Manufacturer: Beemiller, Inc.,
Mansfield, Ohio

Cartridge: 9 x 19mm (9mm Luger)

Magazine capacity: 8 rounds

Overall length: 6.75 inches

Height: 5.12 inches

Barrel length: 3¹/₂ inches

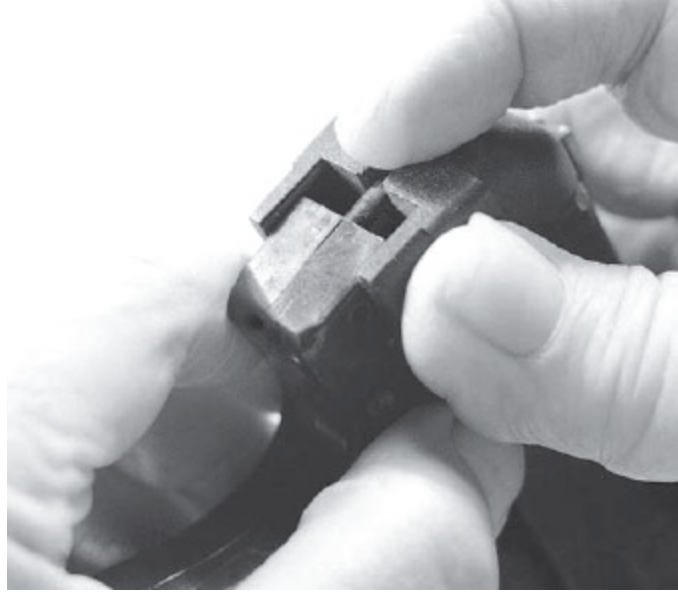
Weight: 31 ounces

This excellent design by Tom Deeb is well-made, quite ugly in appearance, low-priced, and totally reliable. The first versions were made in 1988 and 1990 under various names - Stallard, Iberia, Haskell. Now, as sold by MKS Supply, they are all Hi-Point. The C9 was introduced in December, 1992. All of the Hi-Point pistols now have two automatic internal “drop safety” features.

Field Strip:



- 1.** With the magazine in place, pull the slide back and use the safety to lock it in open position. This will align the cuts in its lower edge with the roll-type cross-pin at the upper rear of the frame. Use a roll-pin punch to drift out the pin.



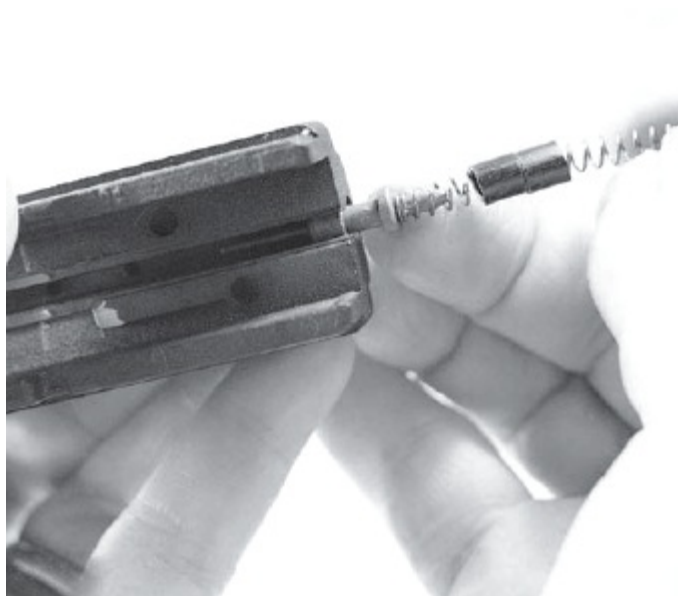
- 2.** Return the slide to its forward position, and pull the trigger to drop the striker to fired position. Move the slide slightly rearward, and lift it at the rear, moving the striker spring base (“slide retainer”) out of its recess in the frame. Lift the slide further, and ease it off toward the front. Be sure the tip of the firing pin clears the rear face of the barrel as the slide is lifted.



- 3.** Remove the recoil spring and its guide. Remove the magazine.



4. Remove the striker spring base (“slide retainer”).



5. Remove the striker (“firing pin”) and its spring and guide sleeves.
Note that early pistols may have a single guide sleeve.



Hi-Point Model C9 field-stripped

Detail Strip:



6. Drifting out the vertical pivot pin will allow the removal of the extractor and its coil spring.



7. The rear sight is retained by a vertical Allen screw. The other screw is the elevation adjustment.



- 8.** In all of the following steps, remember that the frame is made of polymer. Use no extreme force. Remove the left grip screw, tip the panel slightly outward at the top, and move it upward to clear its lower retaining tabs. Note that the safety must be in on-safe position for clearance.



9. Turn the safety down to off-safe position, and remove it.



10. Remove the right grip screw, and take off the panel in the same way as the left one. Remove the magazine safety (“magazine lockout”).



11. Remove the magazine catch spring.



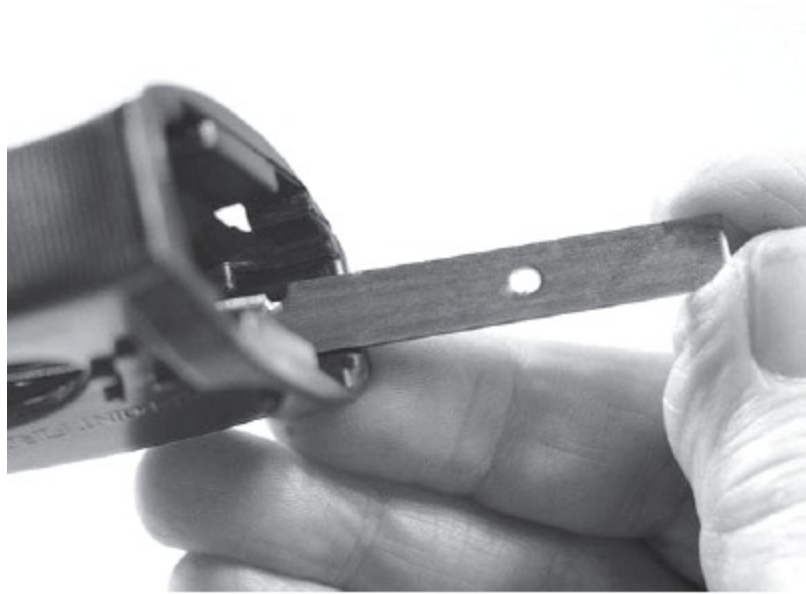
12. Restrain the sear, and remove the sear lever.



13. Remove the sear and its coil spring.



14. Turn the counter-weight pin upward, and remove it toward the right.



15. Remove the counter-weight downward.



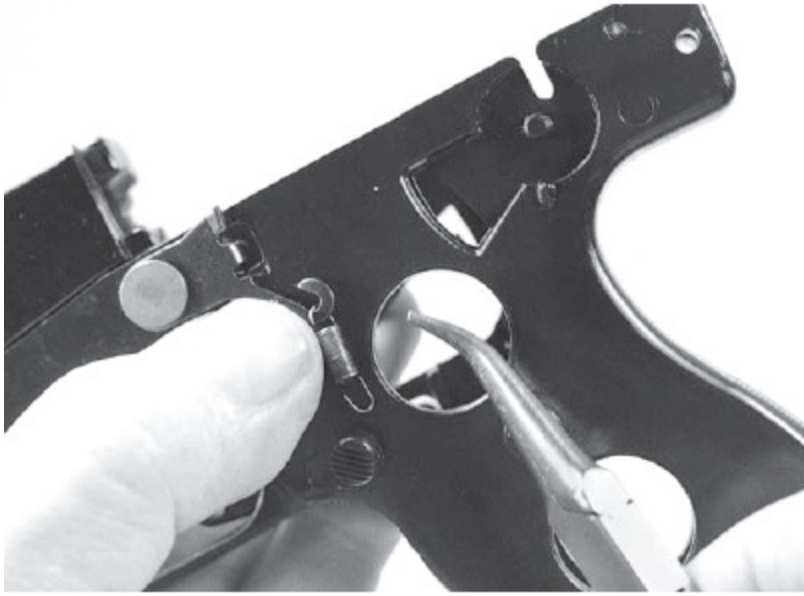
16. Use a small tool to lift the sear block until it can be grasped.
Remove the block and its coil spring.



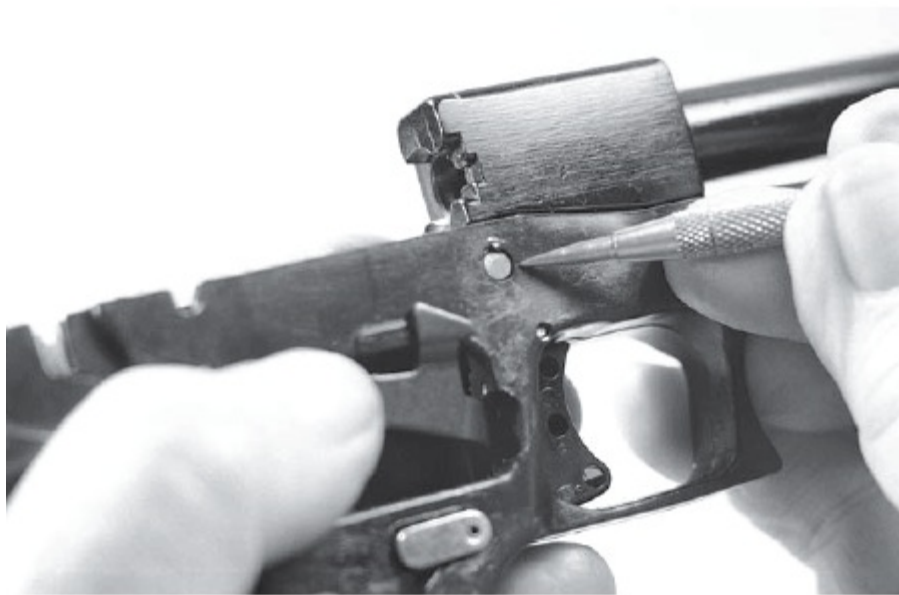
17. The sear housing in the frame is not routinely removable.



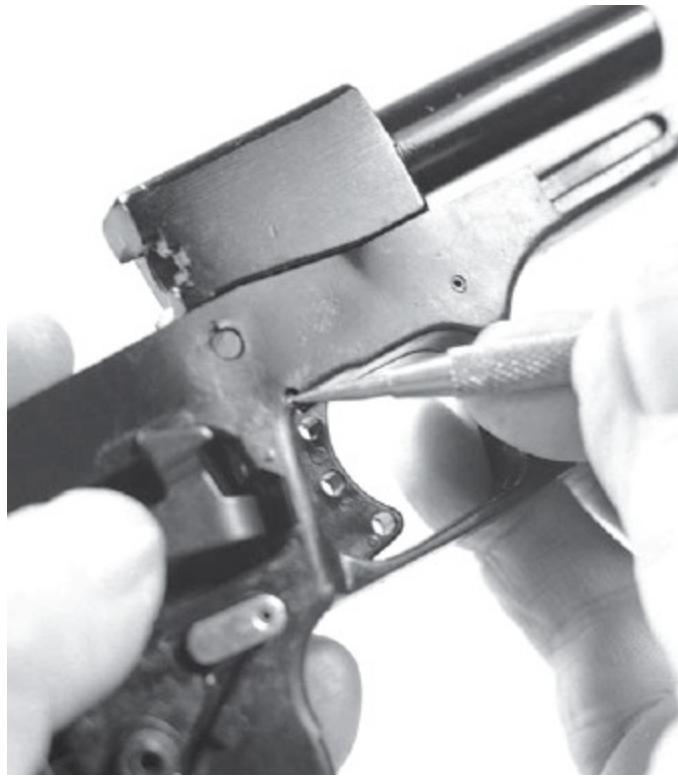
18. The roll-type cross-pin and the smaller pin at upper rear retain no parts, and are not removed in normal takedown.



- 19.** To remove the expansion coil spring that powers the slide hold-open, unhook it from the magazine release shaft, and detach it from the hold-open.



- 20.** Drifting out the large cross-shaft will allow removal of the hold-open. The shaft is tightly fitted, and this should be done only for repair.



- 21.** Drifting out the trigger cross-pin will allow the trigger assembly to be taken out toward the rear. The small cross-pin in the trigger retains the trigger bar and its coil spring.



22. Removal of the magazine catch requires prying off the polymer release button. This should be done only for repair purposes.

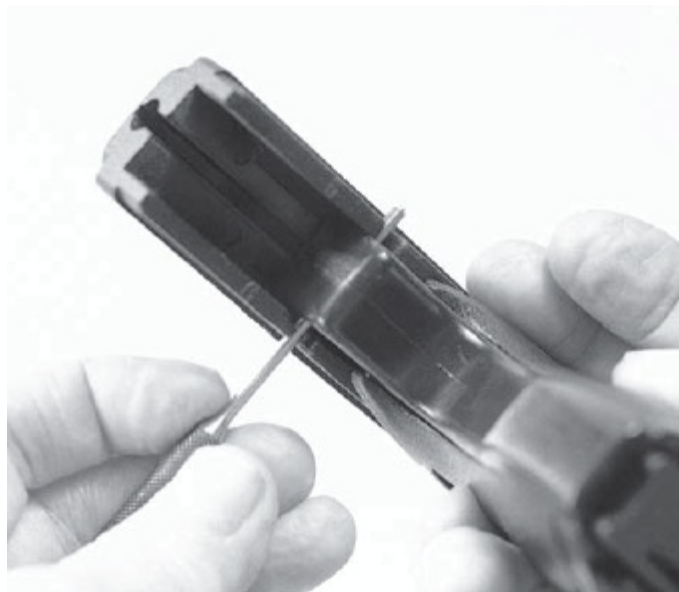
Reassembly Tips:



1. This view shows the parts on the right side in proper order, before the grip is re-installed. Remember, this is a polymer frame, and the grip screw is not a machine screw. Avoid over-tightening.



2. Here are the left-side parts, in proper order.



3. When the slide is re-installed, the magazine must be in place. After the spring base ("retainer") is seated, insert a drift of the

proper size to insure alignment before driving in the cross-pin.

Hi-Standard Sharpshooter

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Hi-Standard Sharpshooter also apply to the following guns:

Hi-Standard Supermatic

Hi-Standard Supermatic Citation

Hi-Standard Supermatic Citation Military

Hi-Standard Supermatic Trophy Military

Hi-Standard Olympic ISU

Hi-Standard Supermatic Tournament

Hi-Standard Supermatic Standard Citation

Hi-Standard Supermatic Trophy

Hi-Standard Victor



Data: Hi-Standard Sharpshooter

Origin: United States

Manufacturer: High Standard
East Hartford,

Connecticut

Cartridge: 22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 9¹/₂ inches

Height: 5⁵/₈ inches

Barrel length: 5¹/₂ inches

Weight: 45 ounces

In the years between 1932 and the closing of the factory in 1984, the High Standard company made a lot of good 22-caliber automatic pistols. Many of the older ones have now disappeared into collections, but the later guns, from the Supermatic series on, are still very much in use. The Sharpshooter shown here has the same basic mechanism as the Victor, the Supermatics, and the Olympic ISU model. The instructions will apply for all of these.

Field Strip:



1. With the magazine removed and the internal hammer cocked, lock the slide open with the slide-latch. Fully depress the large button at the front of the frame, and lift the barrel off upward. **Note:** It may be necessary to tap the button lightly with a nylon hammer to free it for depression.



2. Restrain the slide, release the latch, and remove the slide from the frame toward the front. **Gun is now field-stripped.**

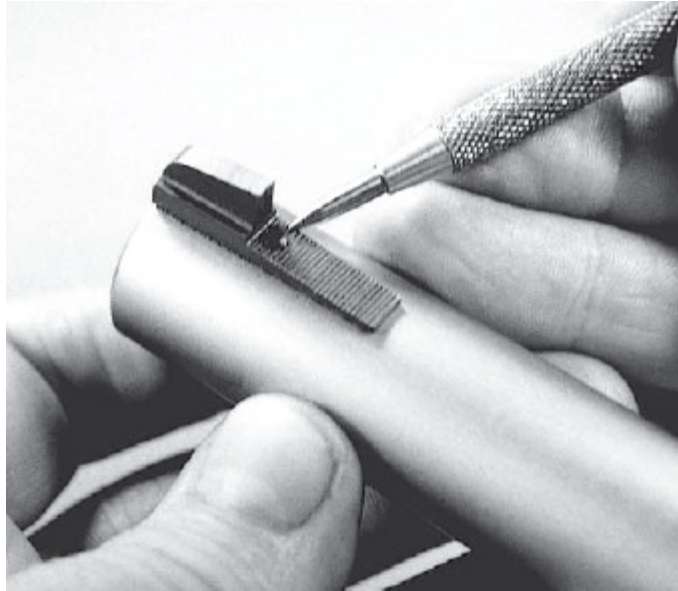


Hi-Standard Sharpshooter field-stripped

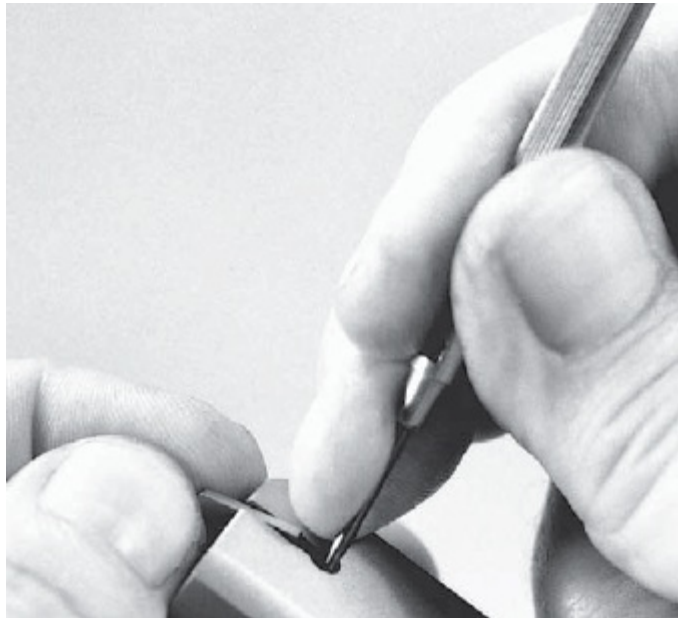
Detail Strip:



- 3.** The barrel post is retained by a roll cross-pin. In normal takedown, the post is not removed.

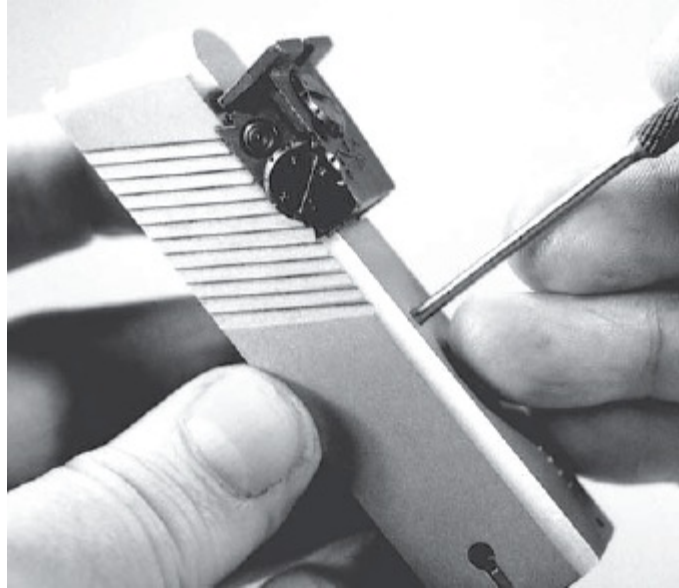


- 4.** The front sight is retained on the barrel by an Allen screw. If removal is not necessary for repair or refinishing, the sight is best left in place.

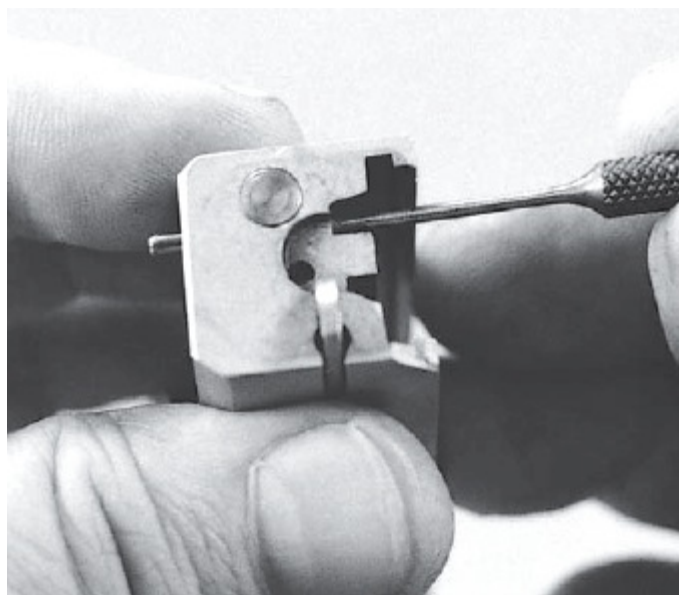


- 5.** Insert a small tool between the extractor and its plunger, and

push the plunger rearward. The extractor can then be tipped out toward the front. **CAUTION:** *Control the plunger and spring, and ease them out forward after the extractor is removed.*

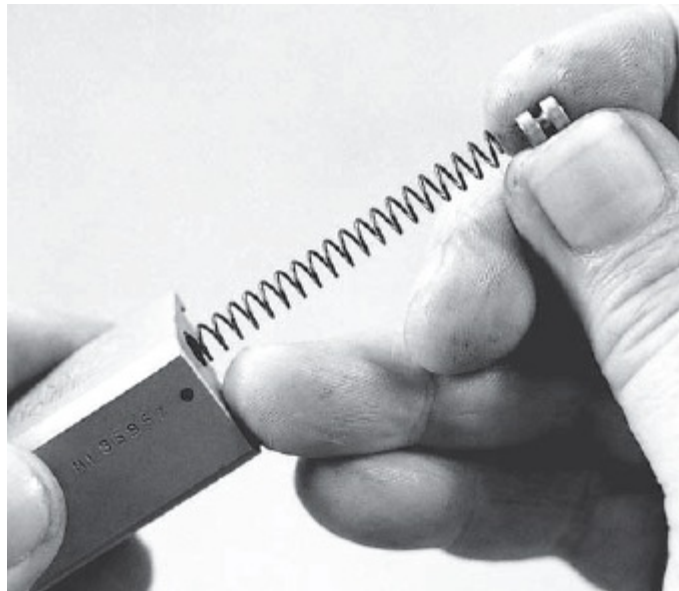


6. The firing pin is retained by a vertical roll pin. This can be driven out in either direction, and the firing pin and its spring are taken out toward the rear.



7. A vertical roll pin near the front of the slide retains the recoil

spring plug. **CAUTION:** *The spring is under tension. When withdrawing the drift after the pin is driven out, control the plug.*



8. Remove the plug, spring, and spring guide toward the front.



9. Restrain the hammer, pull the trigger, and ease the hammer to fired position. Remove the right grip panel. Tip the front pivot of the slide-latch out of its recess in the frame, and remove it. Take care that the small coil spring isn't lost.



10. Remove the left grip panel, and back out the sideplate screw.



11. Lift the sideplate off the trigger and hammer pivot pins, and remove it.



- 12.** Lift the safety-lever off the hammer pivot, and remove it. Removal of the safety will expose the trigger bar spring. Restrain it until it is taken out.



- 13.** Grip the trigger bar spring with pliers, and take it out of its recess. **CAUTION:** *The spring is under tension—control it.*



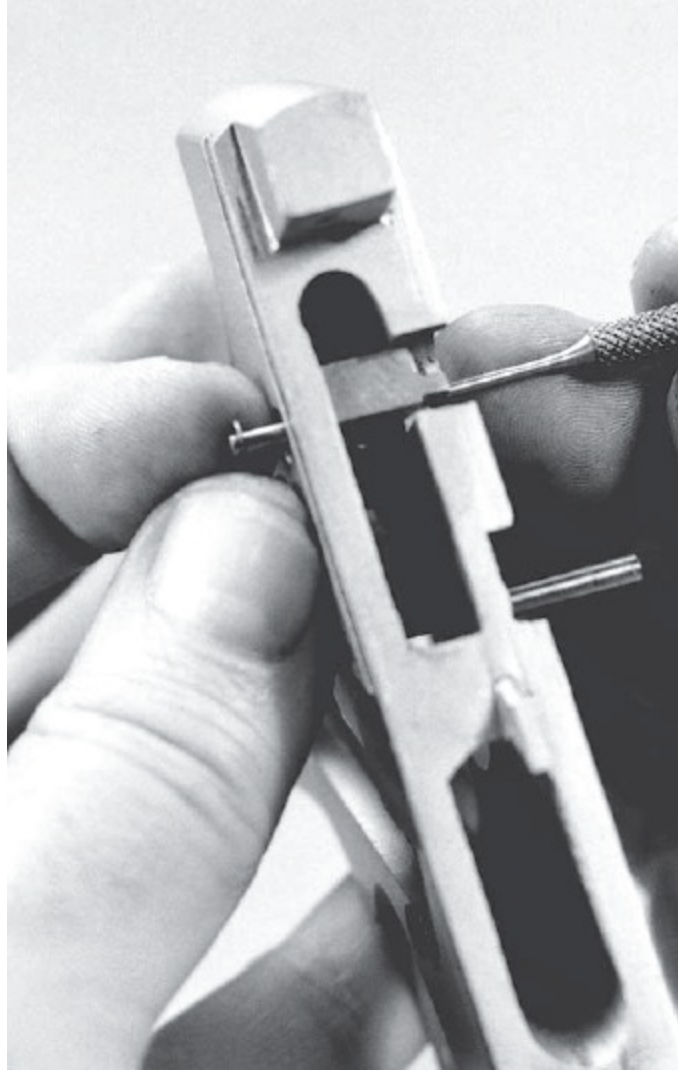
14. Remove the trigger bar toward the left.



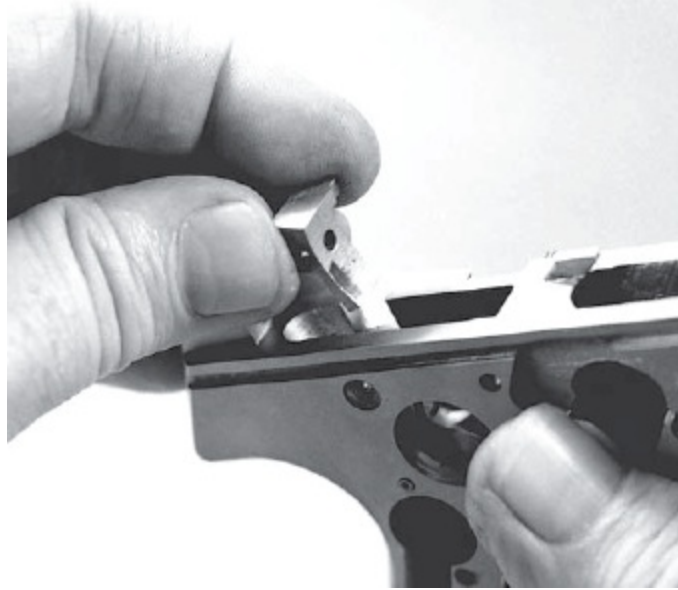
15. Drifting out its cross-pin will allow the trigger to be turned into the guard opening for removal.



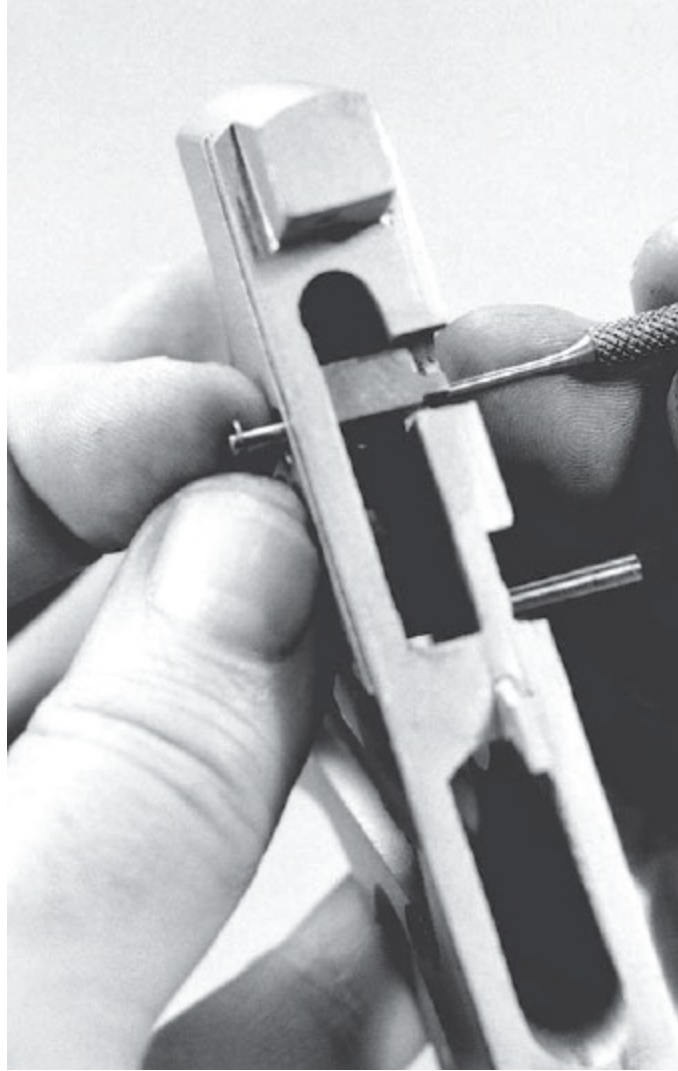
- 16.** Drive out the hammer pivot toward the left. Restrain the hammer as the drift punch is removed.



- 17.** Ease the hammer out upward and remove it, along with the hammer strut and spring. Note that the strut cross-pin is not tightly fitted—take care that it isn't lost.



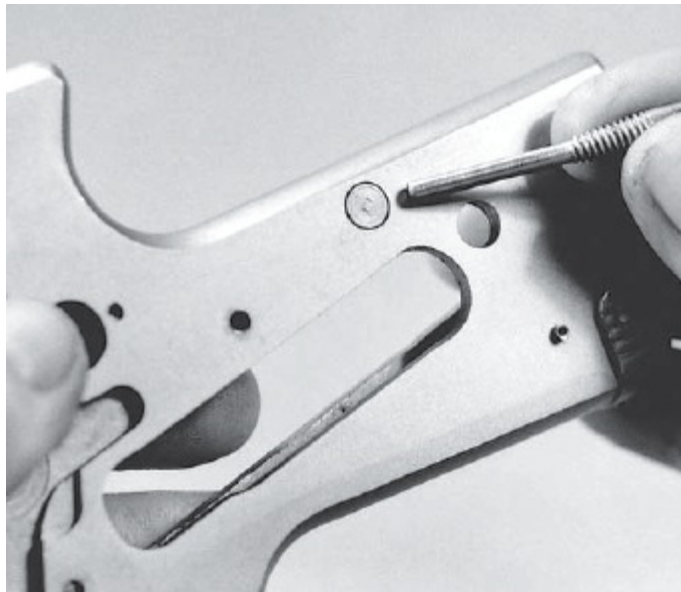
- 18.** The sear cross-pin is easily pushed out of the frame toward the right. Note that its grooved right tip has a C-clip. In normal disassembly, the C-clip is not removed.



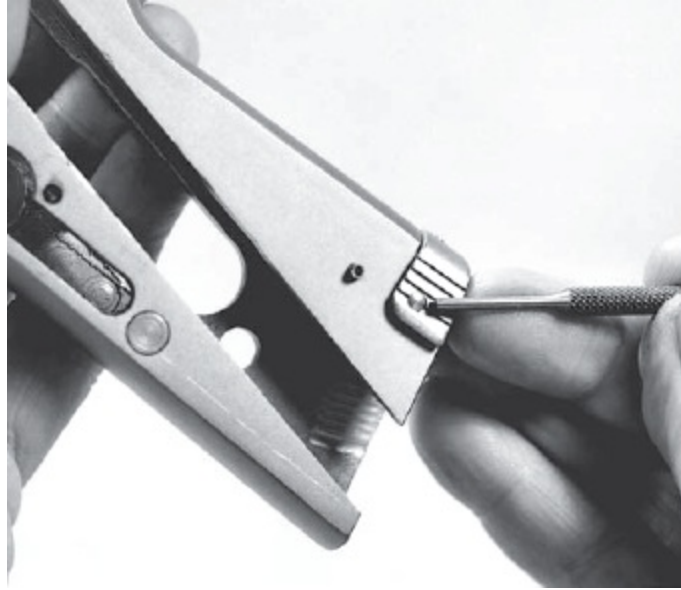
19. Restrain the sear as the drift is withdrawn, and remove the sear upward.



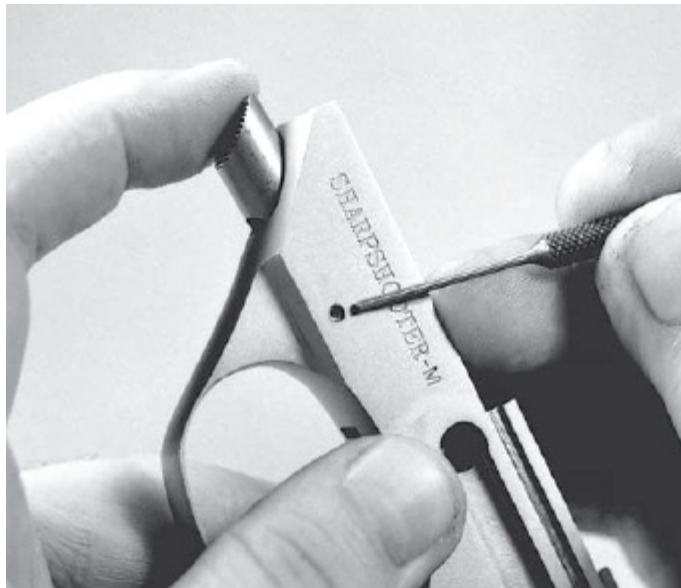
- 20.** The sear spring is mounted on a roll pin in the frame. After the pin is driven out, the spring is taken out upward.



- 21.** The hammer spring base can be pushed out of the frame toward either side, but in normal takedown it is best left in place. if it is removed, be sure it is replaced in the proper orientation for passage of the hammer spring strut.



- 22.** Drifting out the large cross-pin in the magazine catch will allow the U-shaped external piece to be taken off toward the front.
CAUTION: *Removal of the pin will also free the internal plunger, spring, and catch rollers into the magazine well. Insert a shop cloth to catch them.* The small roll pin just above the magazine catch is a grip stabilizing pin, and it retains no part.



- 23.** The barrel latch and its spring are retained by a roll cross-pin at the front of the frame. **CAUTION:** *This is a strong spring, and it is*

under tension, so control the latch button and ease it out.

Reassembly Tips:

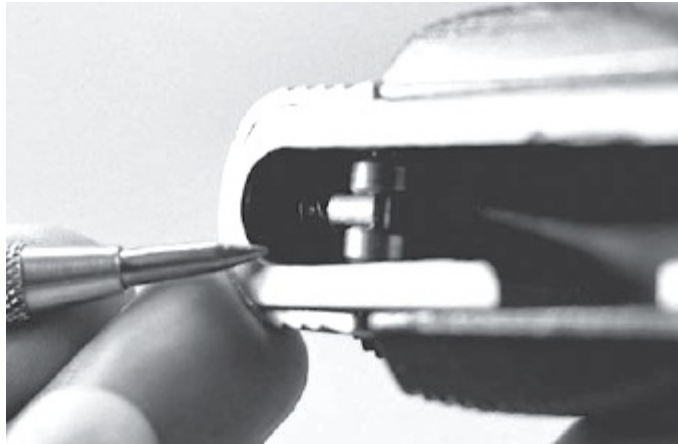


- 1.** The sear spring is shown here on the outside, in the proper orientation for installation.



- 2.** When replacing the hammer and hammer spring assembly, be

sure the semi-circular cut in the top of the strut engages the cross-pin in the hammer. Remember also that the hammer pivot pin must protrude slightly on the left side, to pivot the safety and enter the hole in the sideplate.



3. If you have disassembled the magazine catch system, here is a view of the parts properly reassembled.



4. When replacing the recoil spring system, a small tool can be used to hold the spring while the plug is started into place. When the plug is positioned, insert a drift to hold it, pushing out the drift as the roll pin is driven in.

Interdynamic KG-99

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Interdynamic KG-99 also apply to the following guns:

Intratec TEC-9

Intratec TEC-9M

Intratec TEC-9S

Intratec TEC-9MS



Data: Interdynamic KG-99

Origin: United States

Manufacturer: Intratec,
Miami, Florida

Cartridge: 9mm Luger (Parabellum)

Magazine capacity: 20 and 36 rounds

Overall length: 12¹/₂ inches

Height: 6¹/₂ inches

Barrel length: 5 inches

Weight: 45 ounces

The Interdynamic company became Intratec in 1984, and subsequent models of the pistol, now called the TEC-9, have some external differences from the original KG-99 shown here. Internally, though, the mechanism is the same, and the instructions will apply to the TEC-9 and its variations as made by Intratec. An earlier gun, the KG-9, had an open-bolt firing system, and there are some mechanical differences.

Field Strip:



1. With the magazine removed, cycle the bolt to cock the striker, and push the cocking knob in to the on-safe position. Push out the large cross-pin at the front of the frame toward either side.



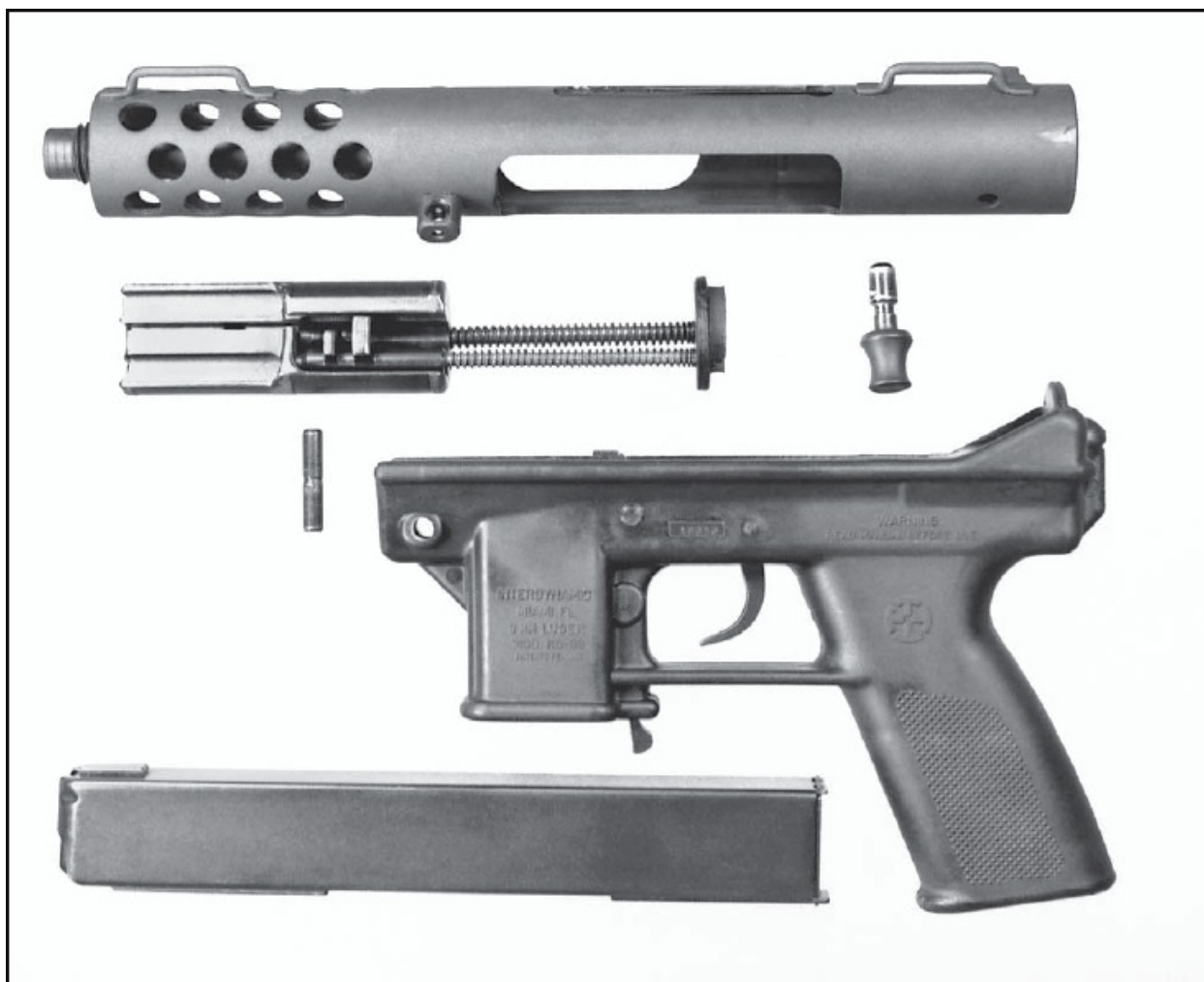
2. Lift the upper receiver at the front, to move its lug out of its well in the frame, and remove the upper receiver forward and upward.



- 3.** Pull out the cocking knob to drop the striker to the fired position. Move the bolt assembly rearward until the knob aligns with the exit opening in its track. Pull the knob out of the bolt and receiver.



4. Remove the bolt assembly toward the rear. **Gun is now field-stripped.**



Interdynamic KG-99 field-stripped

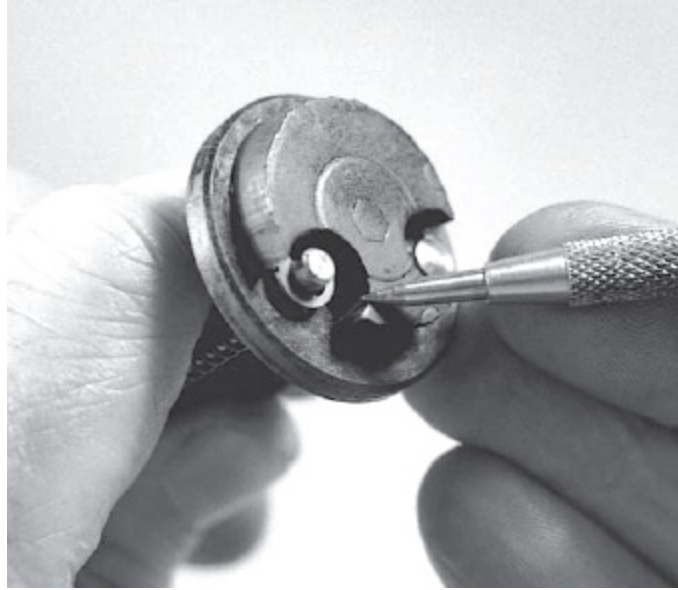
Detail Strip:



5. To remove the firing pin, pull the striker unit back until the firing pin can be tipped out of its socket.



6. To remove the spring system from the bolt assembly, press the bolt back to expose the C-clip on the front tip of the recoil spring guide. Remove the C-clip, and take off the springs and guides toward the rear. **CAUTION:** *These are strong springs, and they are under tension, so control them.* The striker will also be freed for removal.



- 7.** The spring guides are removable from the buffer and buffer plate by taking off the C-clips at the rear, but in normal takedown these are best left in place.



- 8.** The extractor is retained by a large Allen screw in the bolt. Backing it out slightly will free the extractor for removal.



9. Remove the extractor toward the front.



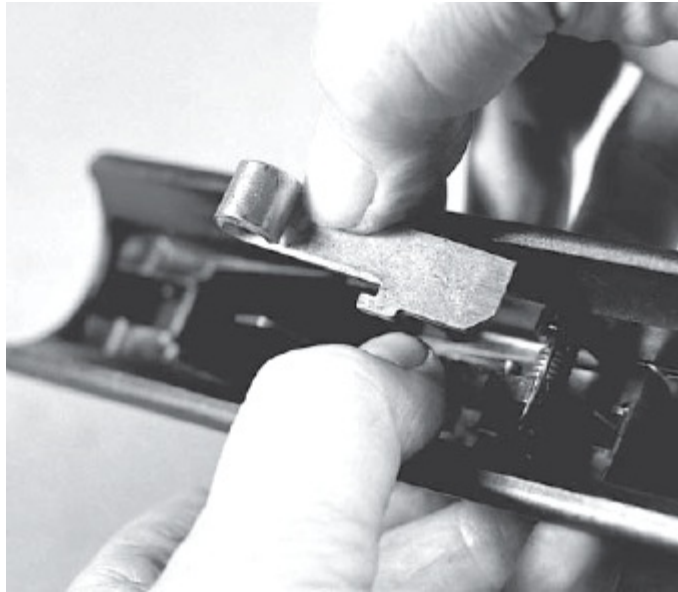
10. Remove the large C-clip from the cross-pin at the front of the frame.



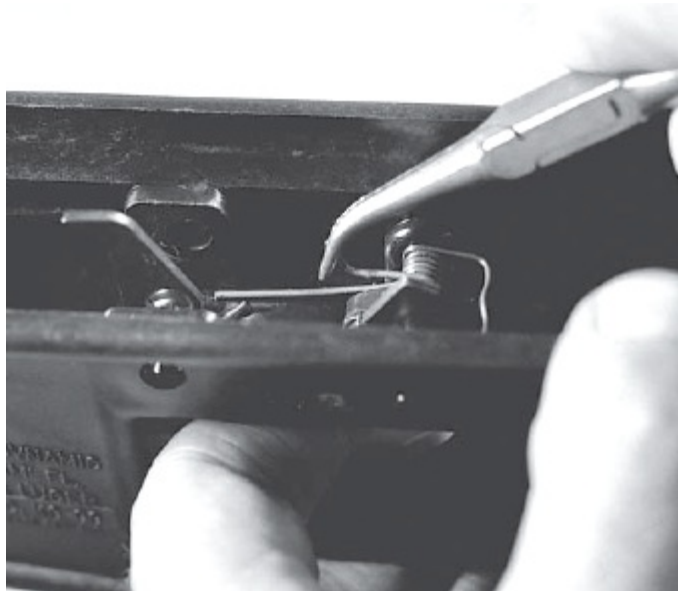
11. Drive out the cross-pin toward the left.



- 12.** Depress the disconnecter and move the sear forward until its spring can be disengaged at the rear. **CAUTION:** *This strong torsion spring is under tension.* Remove the spring forward and upward.



- 13.** Move the sear forward until it clears the sear retainer at the rear, and take it out upward.

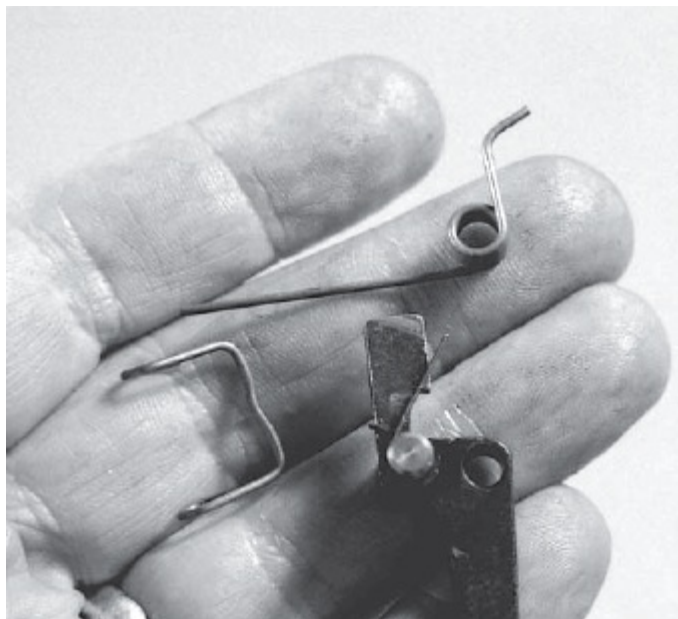


- 14.** Use slim pliers to unhook the short arm of the trigger spring from

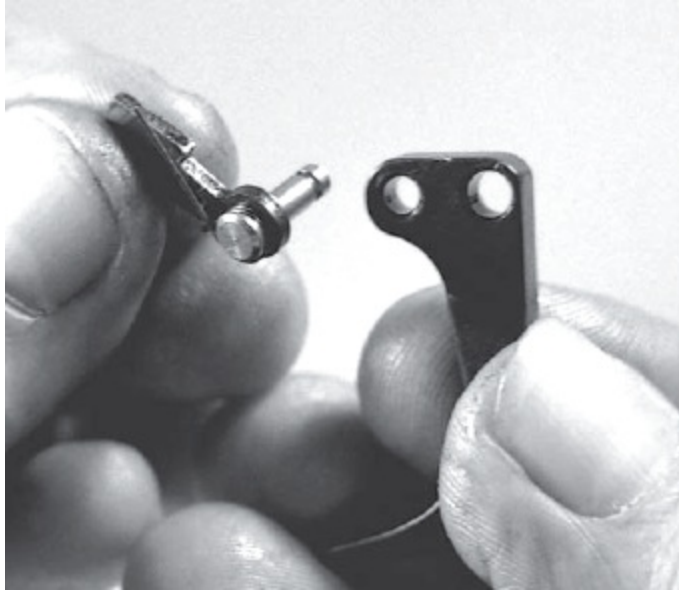
its groove in the right end of the disconnecter pivot.



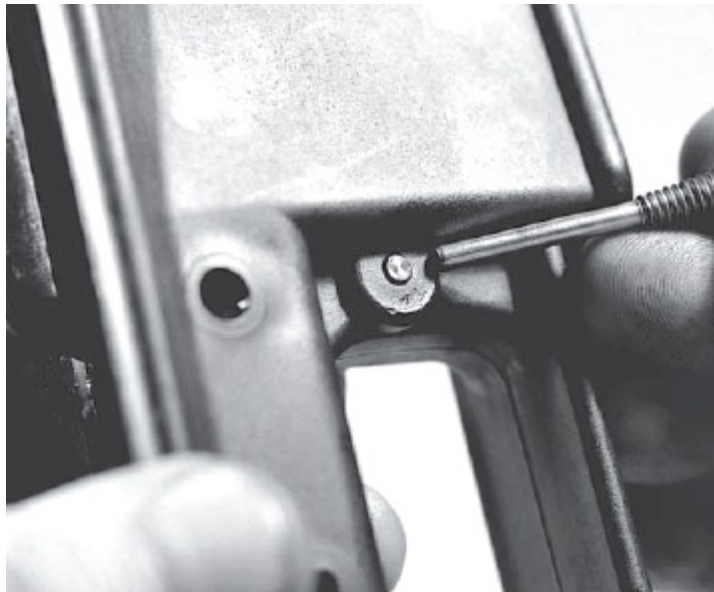
15. Push out the trigger pin toward either side.



16. Remove the trigger system upward.



17. The disconnecter and its pivot and spring are easily detached from the front of the trigger.



18. Drift out the magazine catch cross-pin.



19. Remove the magazine catch, catch spring, and ejector.

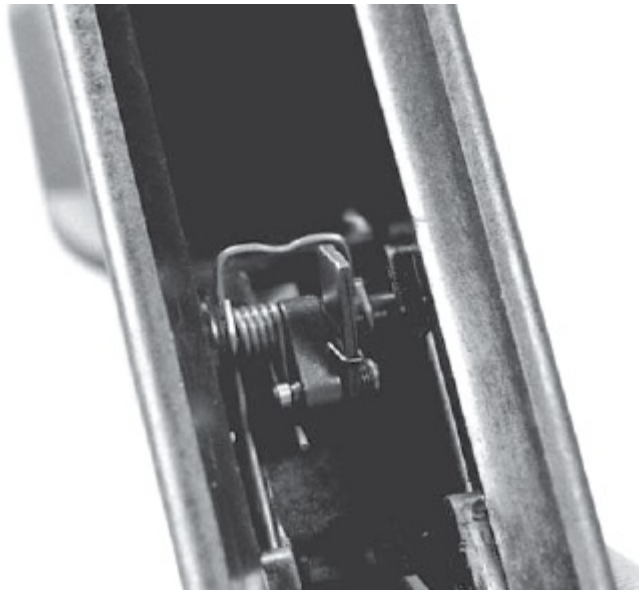
Reassembly Tips:



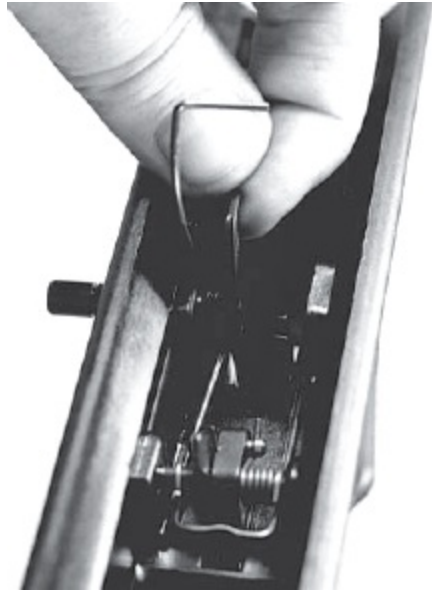
1. Installation of the magazine catch, its spring, and the ejector will require the use of a slave pin. The proper arrangement is shown.



2. The trigger system is shown here in the proper arrangement for installation. Push the trigger cross-pin about one-third of the way in, engage the left loop of the sear retainer, then place the long arm of the disconnecter spring beneath the pin. During insertion of the trigger, be sure the arch of the sear retainer is toward the rear.



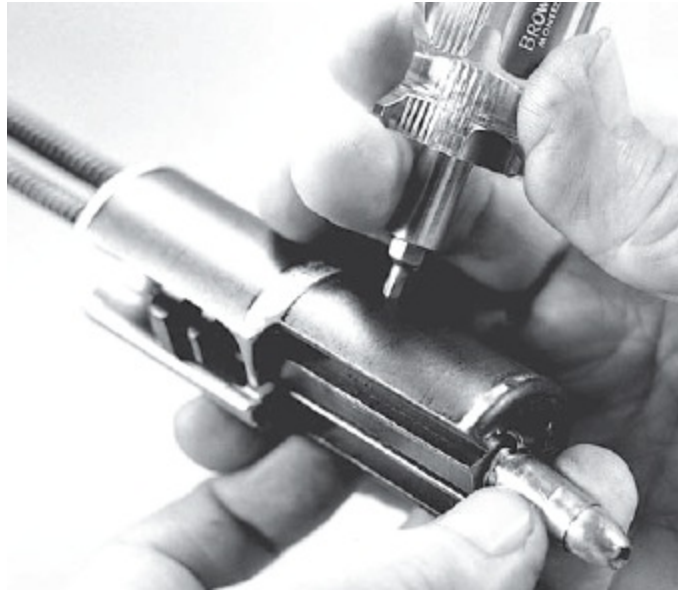
3. The trigger system is shown here properly installed.



4. With the C-clip groove on the left, insert the sear cross-pin about half-way. Install the sear spring and engage the hole in the ejector.



5. Hook the rear tip of the sear into its retainer, and insert a small drift to hold the sear toward the front while the sear spring is re-engaged.



6. When replacing the extractor, a dummy cartridge or a fired case can be used as a gauge to give the proper location before the screw is tightened. **CAUTION:** *Improper depth or alignment can damage the extractor when the screw is set.*



7. Replacing the firing pin in the striker is not difficult. The system is designed to prevent mis-assembly.



- 8.** Before replacing the upper receiver on the frame, draw the striker back to the position shown, and push in the bolt handle to hold it there. This will make insertion of the cross-pin easier.

Iver Johnson X300 Pony

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Iver Johnson X300 Pony also apply to the following guns:

Star Model BM

Star Model S

Star Model BKM

Star Model SM

Star Model DK

FI Model D



Data: Iver Johnson
Model X300 Pony

Origin: United States

Manufacturer: Iver Johnson Arms,

Middlesex, New Jersey

Cartridge: 380 ACP

Magazine capacity: 6 rounds

Overall length: 6 inches

Height: 4¹/₄ inches

Barrel length: 3¹/₈ inches

Weight: 20 ounces

This neat little gun began just over 30 years ago as the Star Model DK. At one time there were plans to make it as the Colt Pony, but some snag developed and this never happened. Later, this pistol was produced in the U.S. by Firearms International, and it was sold for a time as the FI Model D. Then, for a while, Iver Johnson made it as the X300 Pony. At the time this is written, it is no longer in production. The basic Star construction of this gun is close to the mechanism of the larger Star BM and BKM 9mm pistols, and the medium-frame 380 ACP. The instructions will generally apply.

Field Strip:



1. With the magazine removed and the hammer cocked, pull the slide to the rear and lock it in place with the safety catch. Push on the exposed end of the slide-latch shaft on the right side of the frame, and remove the slide-latch toward the left.



2. Holding the slide against the tension of the recoil spring, release the safety and run the slide assembly forward off the frame.



3. Lift the recoil spring guide at the rear to clear the barrel link, and remove the guide and spring toward the rear.



4. Turn the barrel bushing toward the left side of the slide until its lug aligns with the open track in the slide, and remove the bushing toward the front.



5. Tip the barrel link forward and remove the barrel toward the front of the slide. **Gun is now field-stripped.**

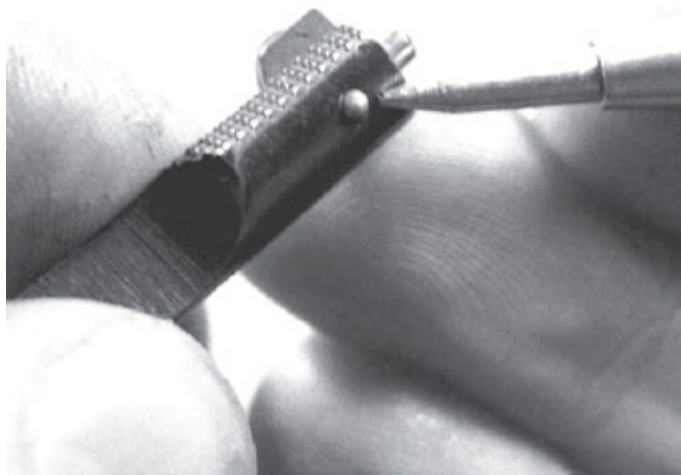


**Iver Johnson X300
Pony field-stripped**

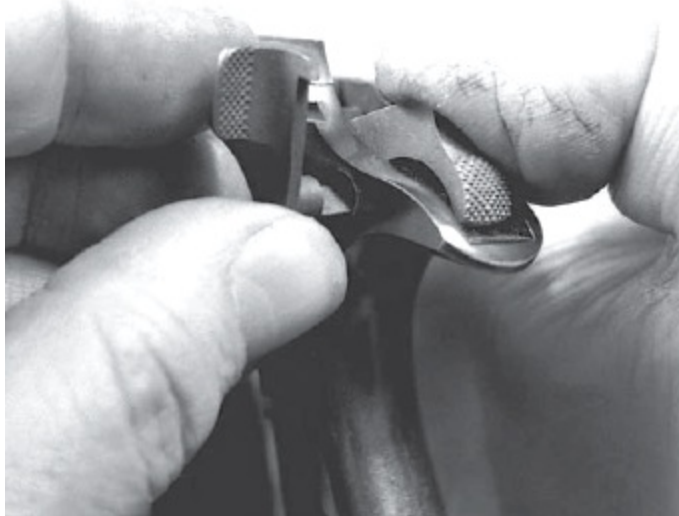
Detail Strip:



6. The extractor is tempered to be its own spring, and is retained by two vertical roll pins on the right side of the slide. Removal of the rear sight will expose a vertical pin which retains the firing pin, and is easily pushed out from the underside of the slide.



7. A small horizontal pin in the slide-latch retains its plunger and spring.



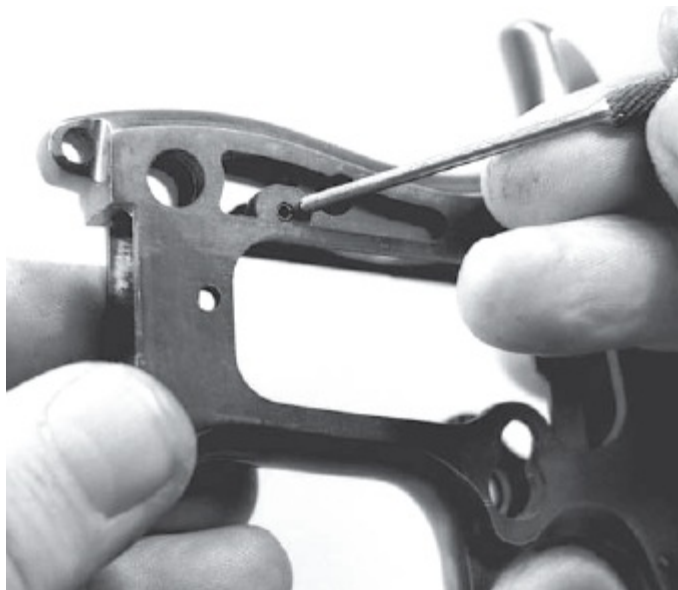
8. With the hammer depressed beyond the full-cock position, and held there, rotate the safety-lever to vertical position and remove it toward the left. **CAUTION:** *The safety spring and plunger will be released as the lower edge of the safety-lever clears the center of the hammer pivot, so restrain them with a fingertip.*



9. Remove the safety spring and plunger from their hold in the hammer pivot.



- 10.** The magazine release is removed in the same manner as the one on the U.S. Model 1911 pistol. The release button is depressed even with the frame, and the screw-slotted retainer on the right side is turned to the left until its internal lug locks into a slot in the body of the release. The magazine release can then be taken out toward the right.



- 11.** With the hammer at rest, restrain it with downward pressure on top, and push out the hammer pivot toward the left side.

CAUTION: *Even at rest, the hammer spring is slightly compressed. Be careful, and ease the hammer out, then remove the follower and spring. The small pin below and forward of the hammer pivot retains the sear. The disconnecter is slid down out of its vertical recess only after removal of the trigger and trigger bar. Removal of the ejector and its base is not advisable except for replacement. If it is to be taken off, the small pin directly above the sear pin must be drifted out from left to right, and the ejector removed straight up off the frame.*



- 12.** The sear spring is retained by a roll pin in the lower rear section of the grip frame. Use a special roll pin punch to remove the pin, and take out the spring forward, into the magazine well.



- 13.** The trigger assembly is retained by a cross-pin. After removal of the cross-pin, move the trigger to the rear, into the magazine well, springing the trigger bar slightly outward to clear the rear of the grip frame. A small cross-pin holds the bar to the trigger, and when this is drifted out it will release a spring and plunger mounted inside the trigger. **CAUTION:** *This spring is under tension. Remove carefully to avoid injury or loss of the spring and plunger.*

Reassembly Tips:



1. When replacing the safety, remember to depress the hammer before insertion of the safety. When turning the safety back down to normal position, use a small screwdriver to hold the safety spring and plunger pushed in until the edge of the safety covers it. **CAUTION:** *Guard against escape of the spring and plunger.*

When replacing the slide stop, depress its plunger with a thumbnail to assist it in passing the outer end of its bearing stud on the frame.

Kahr K9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Kahr K9 also apply to the following guns:

Kahr E9

Kahr MK9

Kahr K40

Kahr MK40



Data: Kahr K9

Origin: United States

Manufacturer: Kahr Arms,
Worcester,

Massachusetts

Cartridge: 9mm Luger

Magazine capacity: 7 rounds

Overall length: 6 inches

Height: 4⁷/₈ inches

Barrel length: 3¹/₂ inches

Weight: 26 ounces

Designed by young arms genius Justin Moon, the Kahr was introduced in 1993. It has subsequently been offered in 40 S&W chambering, and in sub-compact versions. The only mechanical change has been the elimination of a frame insert at upper rear, and this will cause no difficulty in the takedown.

Field Strip:



1. With the magazine removed, move the slide back until the notch in its lower edge is aligned with the front end of the slide latch,

as shown.

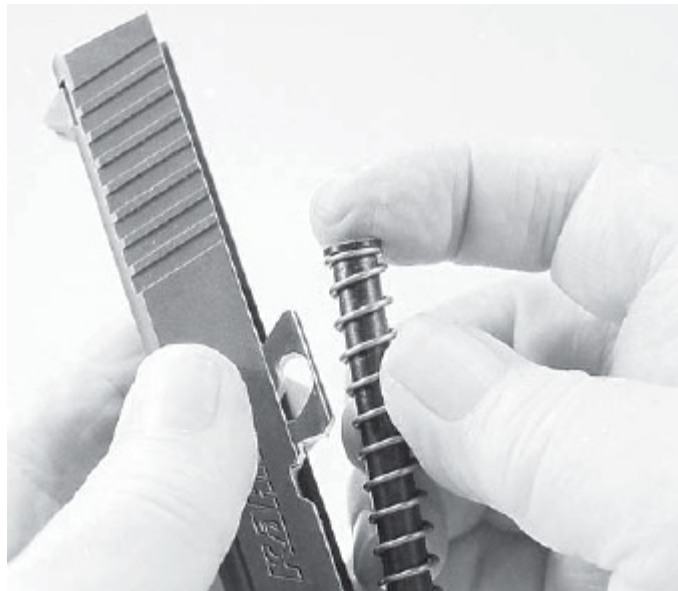


2. Keeping the slide exactly in the position shown above, use a plastic mallet to tap the end of the slide latch cross-shaft. The latch will pop out on the other side. **Note:** Be sure the slide is held in place, or the latch cannot exit, and may be damaged.

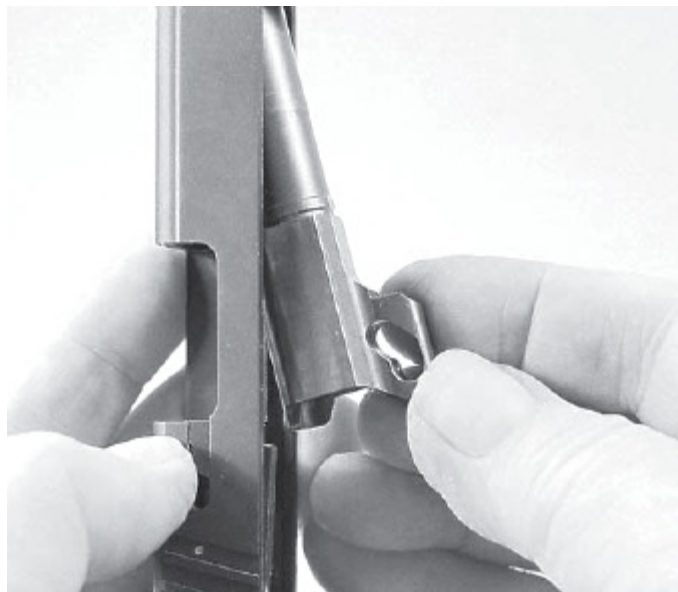


3. Ease the slide forward to normal closed position, and pull the trigger to drop the striker to fired position. Release the trigger,

and move the slide and barrel assembly off the frame toward the front.



4. Disengage the rear tip of the recoil spring guide from the front of the barrel underlug. **CAUTION:** *Control the strong spring and remove the guide and spring.*

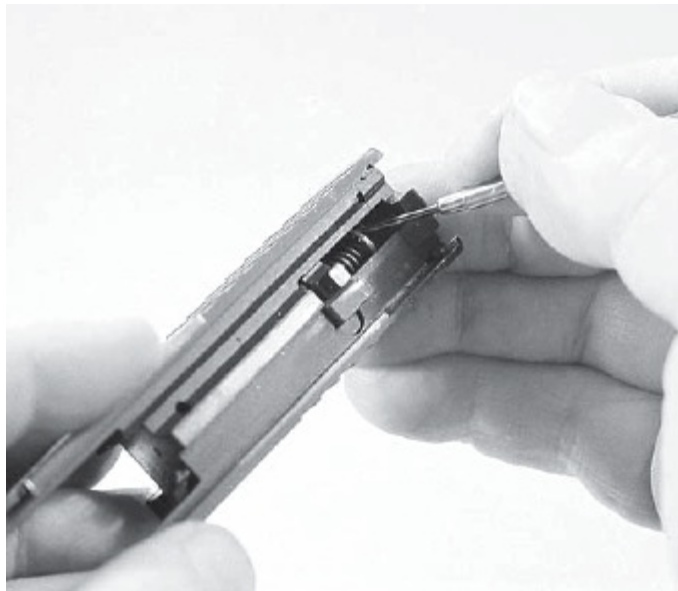


5. Move the barrel slightly forward to clear the extractor, tip it outward, and remove it.

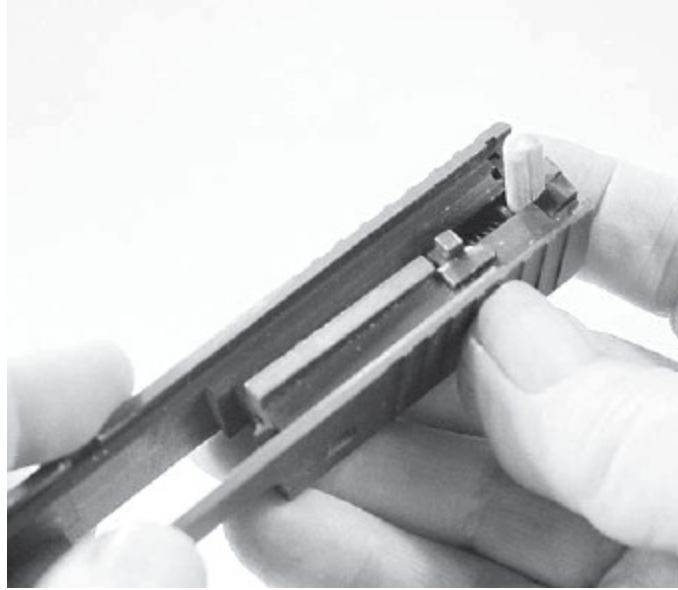


Kahr K9 field-stripped

Detail Strip:



- 6.** Use a small, sharp tool to push the striker spring guide forward until it is beyond the front edge of the slide endpiece.



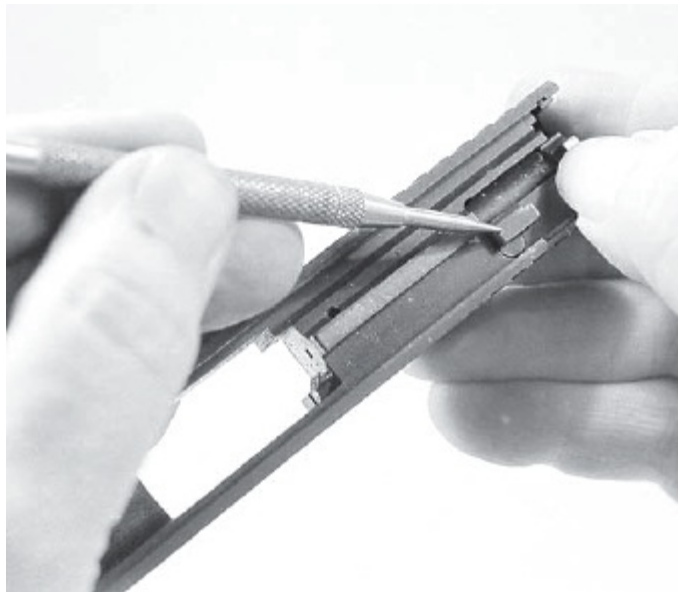
7. Insert a spacer (a side-trimmed piece of quarter-inch wooden rod is shown here) to hold the guide and spring clear of the endpiece.



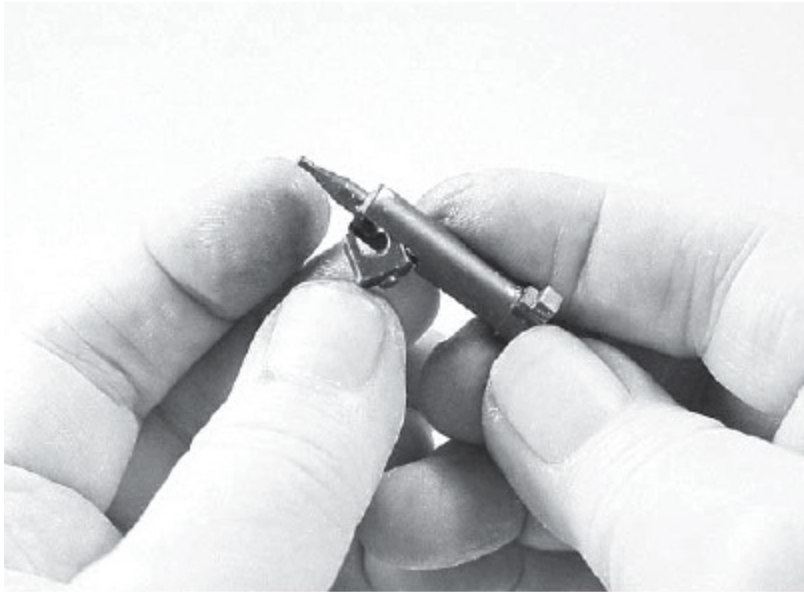
8. Use a very small tool to depress the plunger that locks the slide endpiece, and move the endpiece downward. Note that the right flange of the endpiece extends into the access opening for the locking plunger, so be sure the tool is small enough to pass by the flange. **CAUTION!** As the endpiece is taken off, both the striker spring and the locking plunger spring will be released, so control them.



9. Remove the striker spring and its guide.



10. Move the striker back to the position shown, and depress the striker block to release the striker for removal.



11. As the striker is removed, take care that the rebound piece does not fall free and become lost.



12. Remove the slide endpiece retaining plunger.



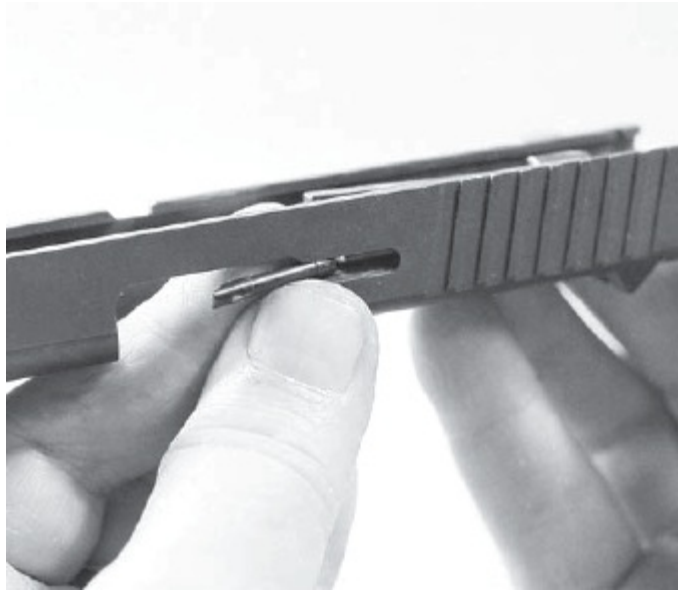
- 13.** Use a tool to push the extractor plunger and spring away toward the rear.



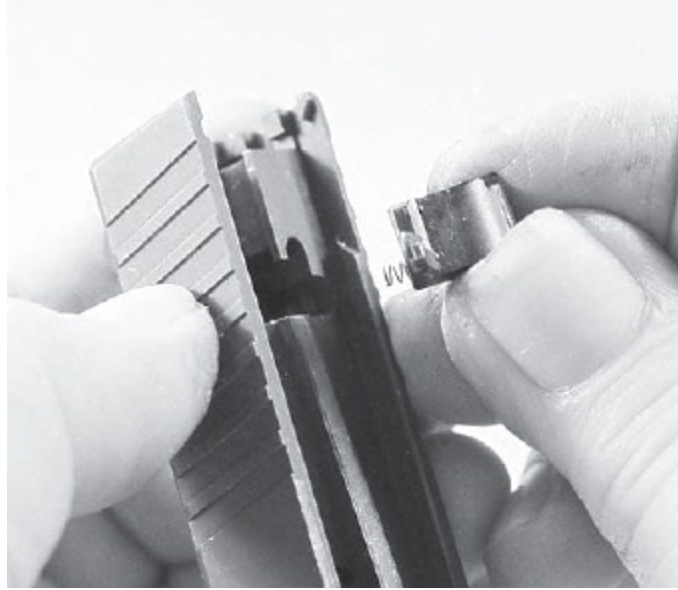
- 14.** Tip the extractor over forward and remove it.



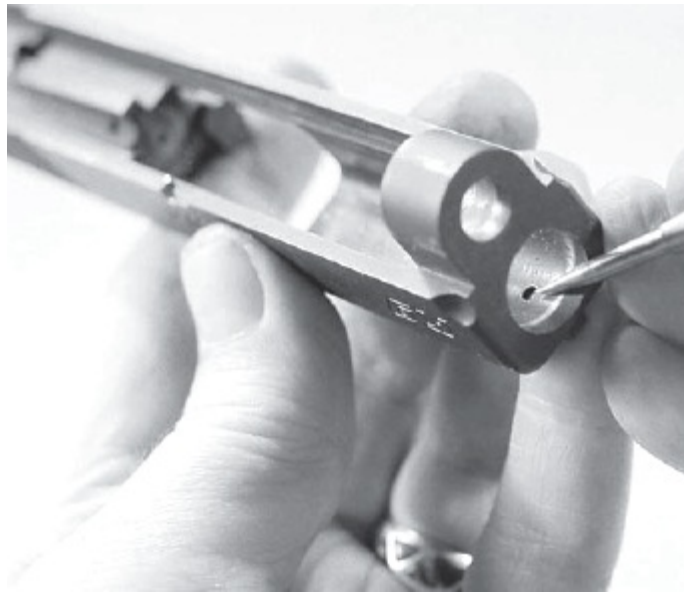
15. Insert a slim tool to push out the extractor spring.



16. Use the same tool to push out the extractor plunger.



17. Remove the striker block and its spring.



18. The rear sight can be removed by drifting it out of its dovetail toward the right. On late guns, the front sight is removed the same way. However, on earlier pistols the front sight is retained in its dovetail by a spring and plunger, accessible just inside the slide at the muzzle. On these guns, attempting to drive out the front sight will cause damage. Depress the plunger with a tool, and slide the sight out. Control the plunger and spring as they

clear. Also, on very early pistols, note that the rear sight has an Allen screw at center that must be loosened before the sight is drifted out.



- 19.** Remove the grip screws, and take off the grip panels. Move the lower arm of the trigger bar spring out of its recess in the frame, and remove the spring.



- 20.** Depress the magazine catch, and use a small screwdriver to turn

the retainer counter-clockwise until it stops.



- 21.** Remove the magazine catch assembly toward the right. Turning the retainer out of its notch will allow the retainer and spring to be taken out. **CAUTION:** *Control the spring.*



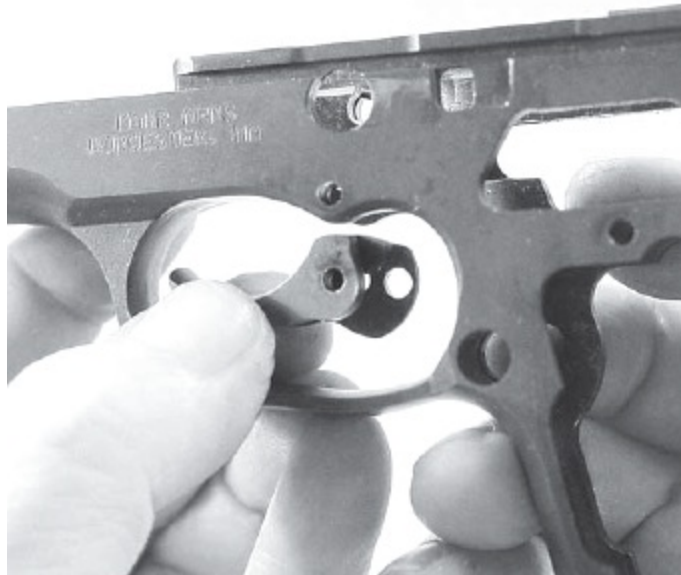
- 22.** Drift out the trigger cross-pin toward the left. These are often tightly fitted, so use a starting drift of the proper size, and be sure the frame is well-supported.



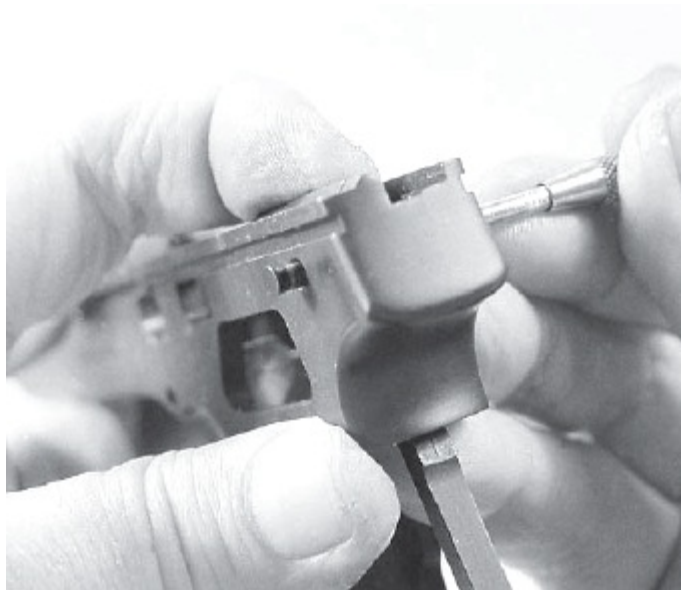
23. Remove the trigger spring and spacer.



24. Remove the trigger bar.



25. Turn the trigger down into the triggerguard space for removal.



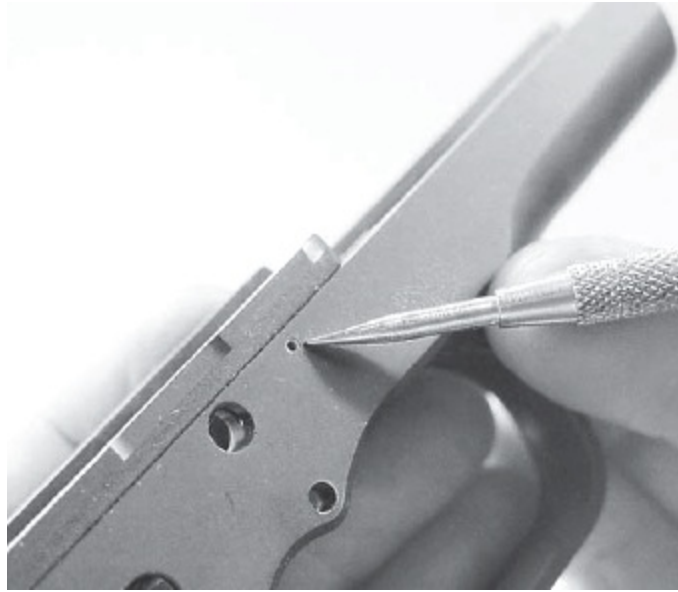
26. Push out the cocking cam cross-pin toward the left.



- 27.** Remove the ejector and the cocking cam. Note that if your pistol is an early one, the ejector will be integral with a frame backpiece insert, and it will be retained by a separate cross-pin. Thus, you will have to remove both pins to take out this unit.

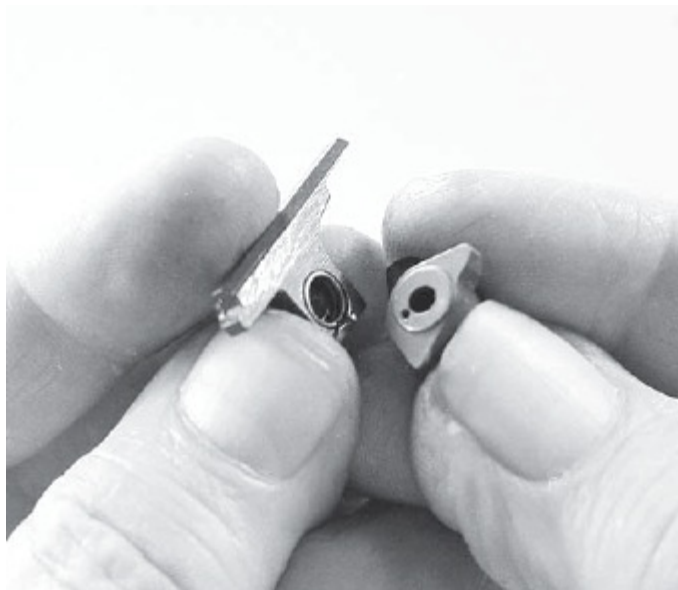


- 28.** The cocking cam spring is easily removed from the base of the ejector.



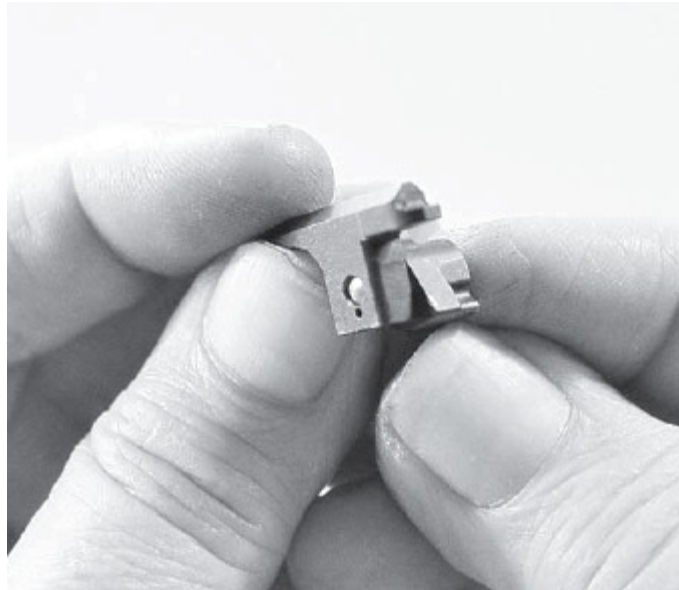
- 29.** Drifting this roll pin inward will release the slide latch spring. Control it as the pin clears. If removal is not necessary for repair or refinishing, this system is best left in place.

Reassembly Tips:



- 1.** When re-installing the cocking cam and the ejector, note that the small lateral ends of the spring must enter the tiny holes in both

parts.

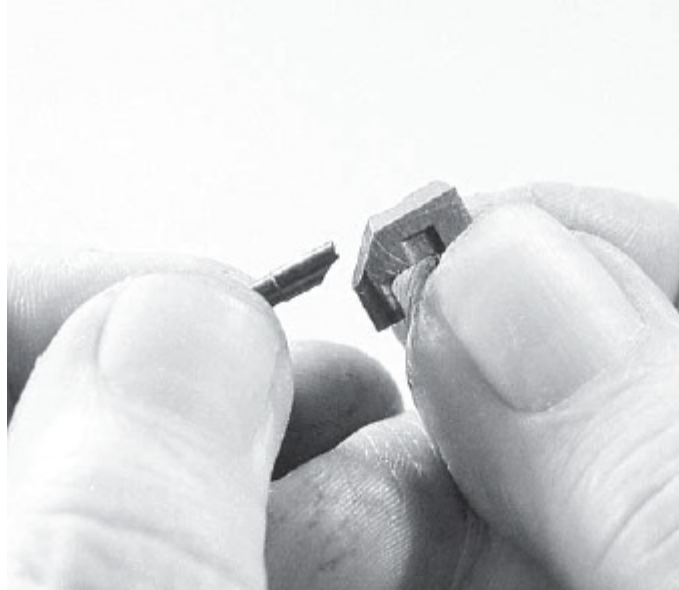


2. Replacement of the ejector and the cocking cam in the frame will require a slave pin to keep the parts and the spring together until the cross-pin can be re-inserted.



3. When installing the trigger spring and spacer, remember that the flange on the spacer must go to the right, and its flat edge forward, to mate with the interior of the trigger. Start the trigger

pin from the left, just into that wall of the trigger. Use a drift of nearly the same size from the right, to position the spring and spacer for entry of the trigger pin.



4. When installing the extractor, note that the plunger must be oriented so its beak mates with the outside slope of the extractor.

Kel-Tec PF-9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the PF-9 also apply to the following gun:

Kel-Tec P-11



Data: Kel-Tec PF-9

Origin: United States

Manufacturer: Kel-Tec CNC
Industries,
Inc., Cocoa, FL

Cartridge: 9mm Luger

Magazine capacity:7
rounds

Overall length: 5.85 inches

Height: 4.3 inches

Barrel length: 3.1 inches

Weight: 12.7 ounces

The PF-9, like its older brother the P-11, is an excellent example of the ability of modern manufacturing techniques and the shrewd mind to produce a high quality, low cost, well-designed compact firearm. This handgun is very thin, lightweight, and simple to use. Notably, there are no large projections such as extended slide stops (a very flat slide stop is present) or safety levers on either side of the gun, allowing it to be as thin as possible without any parts that would snag on clothing. This feature, along with a fully-locking barrel, makes a gun ideal for carry because of its size and controllable recoil. Production began in 2010. The older P-11 is very similar, but most noticeably, utilizes a wider, higher capacity, double stack magazine.

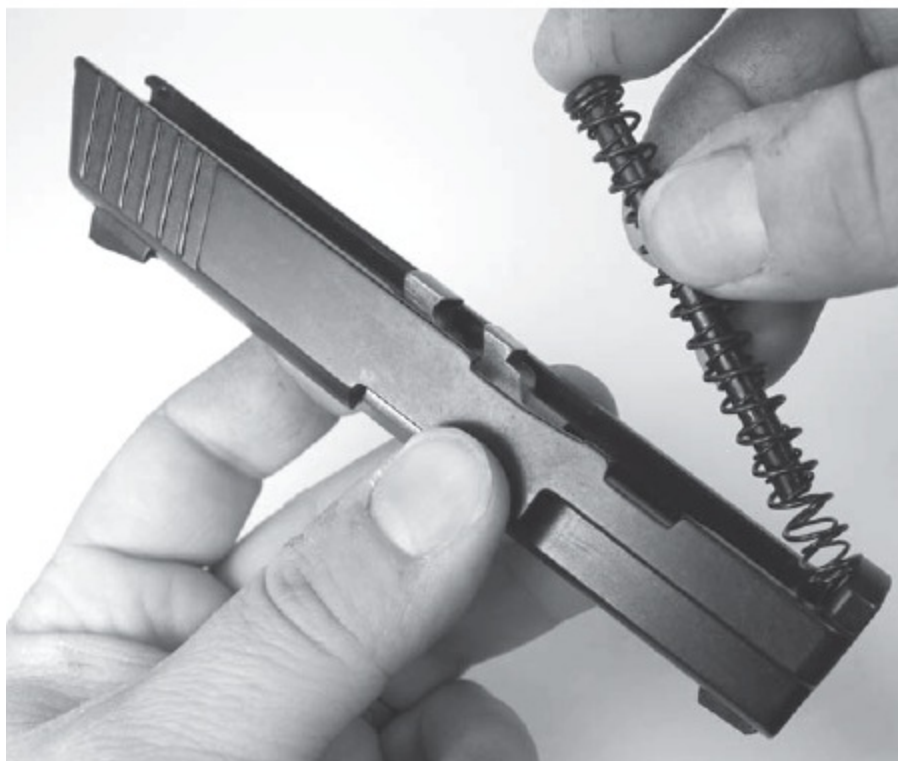
Field Strip:



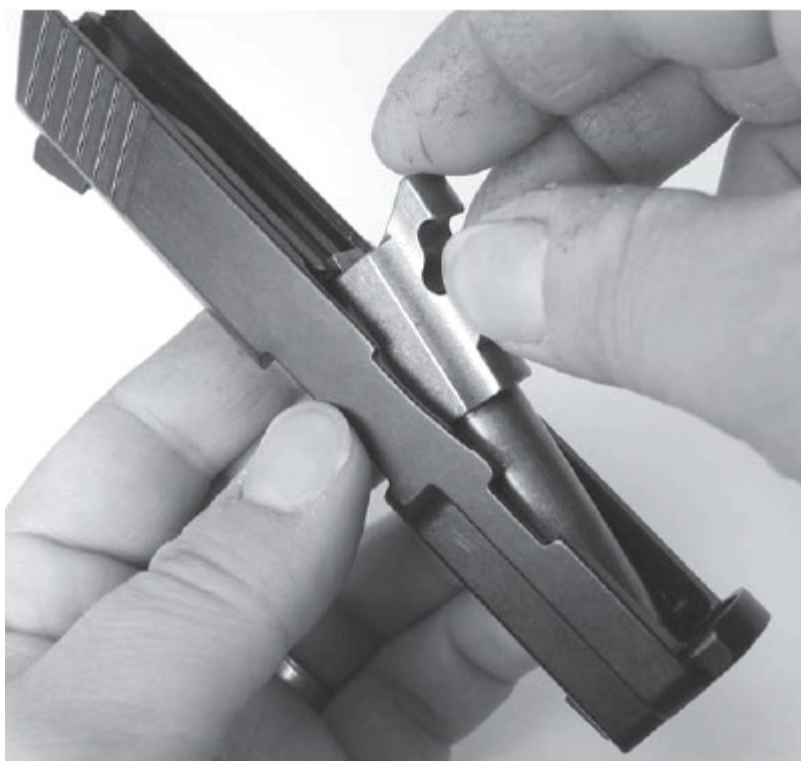
1. With the magazine removed, lock the slide back. Pull the assembly lever out.



2. Pull the slide off of the frame.



- 3.** Remove the recoil spring and guide rod. **Note:** The recoil springs are not captive.

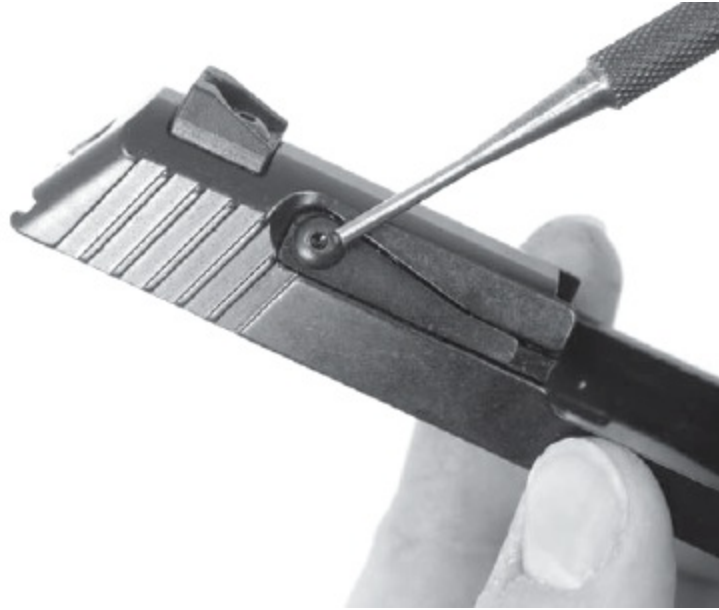


4. Remove the barrel by tilting it up and pulling it out to the rear.



Kel-Tec PF-9 field stripped

Detail Strip:



- 5.** Remove this screw to release the extractor spring and extractor.
Note: The firing pin and firing pin spring are also contained by the screw. Control the firing pin as you remove this screw.



- 6.** The front sight is staked in. The rear sight can be adjusted or removed by loosening or removing this screw.



7. With the hammer all the way forward, the hammer spring catch should be lifted out of its seat and forward into the magazine well and then released. *The spring is under tension, so release it slowly.* This will take tension off of the hammer.



8. Drive out the three large frame pins.



- 9.** Pull the frame from the grip. It may be necessary to gently pry the frame up slightly as the fit is tight.



- 10.** This is the hammer block axis pin. The hammer block assembly is considered a factory service item and should not be removed from the frame.



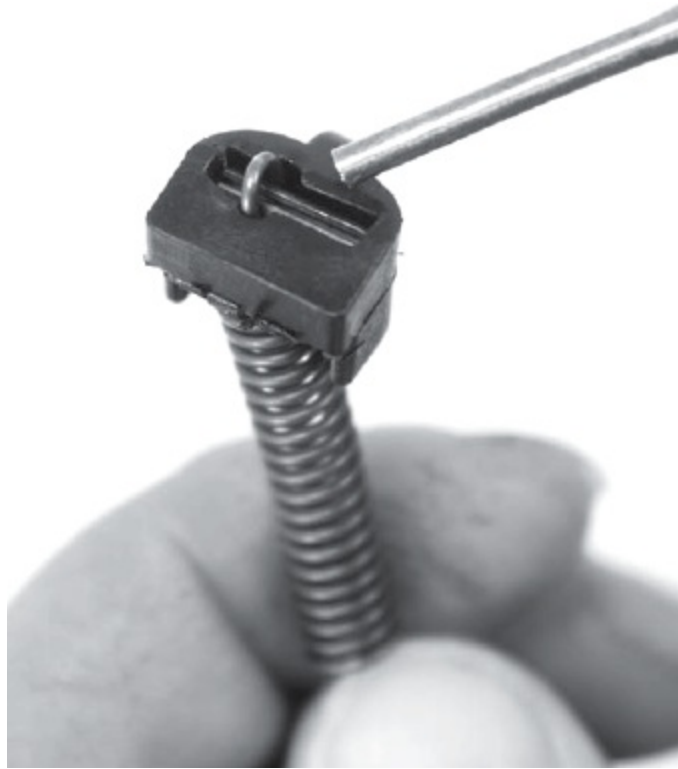
- 11.** Remove the trigger bar from the right side of the frame. **Note:** The spring is compressed.



12. Remove the slide stop and spring from the left side of the frame.



13. Push out this pin to free the hammer and spring assembly.



- 14.** The hammer spring can be removed from the hammer spring catch by pulling out this roll pin (unnecessary, unless replacement is warranted).



15. Removal of the hammer spring pin is not necessary unless the hammer spring needs to be replaced.



- 16.** In older models the trigger pin can be driven out from top to bottom with the trigger fully forward in the frame. This pin also holds the trigger spring in the trigger. In newer models this assembly should not be removed unless something is broken. Even then, it should be returned to the factory for service.



- 17.** Remove the trigger from the frame by removing this pin. In newer models the trigger pin cannot be removed without destroying the parts, therefore this step would not be recommended.



- 18.** The magazine catch can be removed by first pulling the spring up and out and then the catch can be pushed out to the left or the right.

Reassembly Tips:



1. When reinstalling the firing pin, the cut out of the firing pin should be facing this way.



- 2.** When inserting the frame back into the grip, push the hammer block forward so that it is properly placed by inserting a thin tool from the back through the gap between the frame and the grip.
- 3.** When reinstalling the extractor, use a small amount of thread locker on the screw. If the screw walks out the pistol will be nonfunctional. Ensure that only a sufficient amount is used, as too much will flow into the firing pin channel and immobilize the firing pin.

Kel-Tec PMR-30



Data: Kel-Tec PMR-30

Origin: United States

Manufacturer: Kel-Tec CNC Industries,
Inc., Cocoa, FL

Cartridge: .22 WMR

Magazine capacity: 30 rounds

Overall length: 7.8 inches

Height: 5.8 inches

Barrel length: 4.3 inches

Weight: 13.6 ounces

When Kel-Tec introduced the PMR-30 at the 2010 Shot Show it elicited a great deal of interest. The concept of a 30-round magazine fully enclosed in a pistol grip was as exciting as the low price tag. The pistol utilized a hybrid blow-back/recoil mechanism to compensate for a wide variety of .22 magnum ammunition. Furthermore, it is extremely lightweight and easy to shoot with little recoil.

Field Strip:



1. Eject the magazine and cock the hammer. Place the pistol on safe. Press out the disassembly pin, then release the slide and ease it forward until it slides off the front of the barrel.



- 2.** Compress the recoil spring while holding the barrel block and barrel to the rear of the slide. Then lift the recoil spring assembly out of the slide.



- 3.** A small synthetic buffer pressed against the front of the slide must also be removed at this time. Note the direction of the bevel on the buffer, which must face the front of the slide.

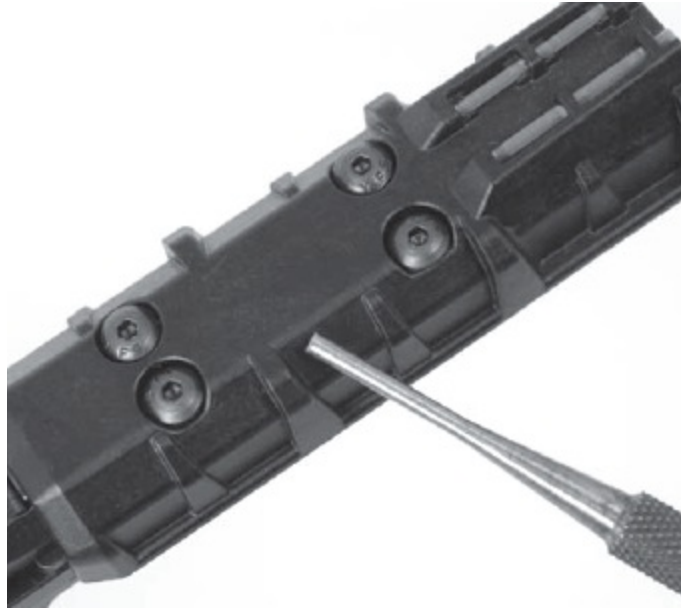


4. Remove the barrel block by sliding it all the way forward until it makes contact with the slide ring and lift it straight up. The barrel can now be removed by turning the slide upright and pushing the barrel to the rear.

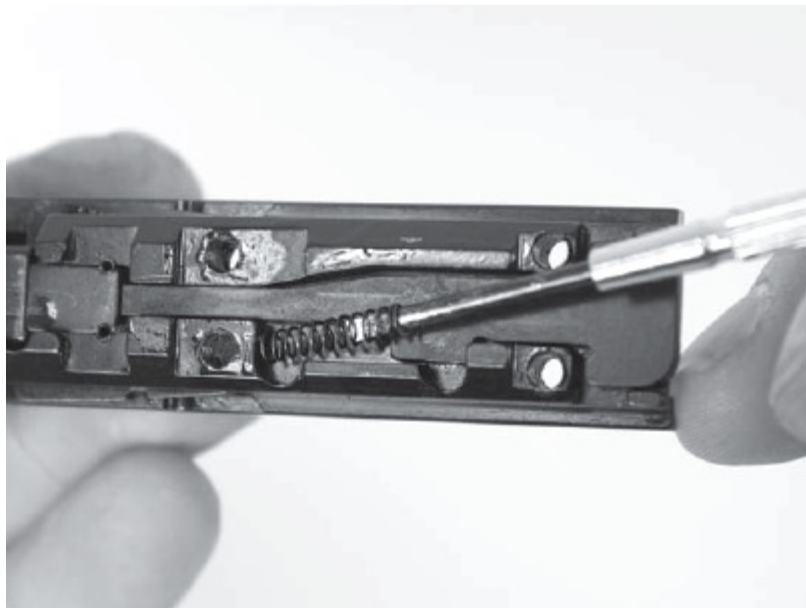


Kel-Tec PMR-30 field stripped

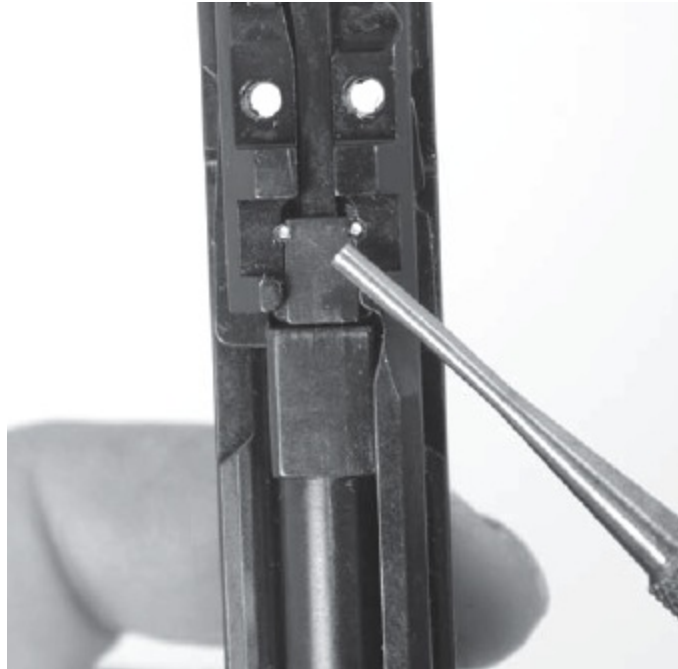
Detail Strip:



- 5.** To remove the slide cover, remove the four screws. This allows access to the extractors and firing pin. Gently remove the slide cover straight up.



- 6.** Gently pry up and remove the firing pin return spring.



7. These two small spring pins are the extractor axes. Driving them out will release both of the right and left extractors (they are different), the single extractor spring between them, the breech face plate that retains the firing pin, and the firing pin itself.



8. The front sight may be driven out to the left if necessary. There

are some front sights that are held on by set screws. These are visible and must be loosened first.



9. Remove both safety lever screws and pull the safety levers off.



- 10.** Remove either magazine catch screw and push out the magazine catch axis.



- 11.** *The magazine catch spring is under tension and will shoot out through the frame if it is not retained.* Pull the magazine catch and catch spring from the frame.



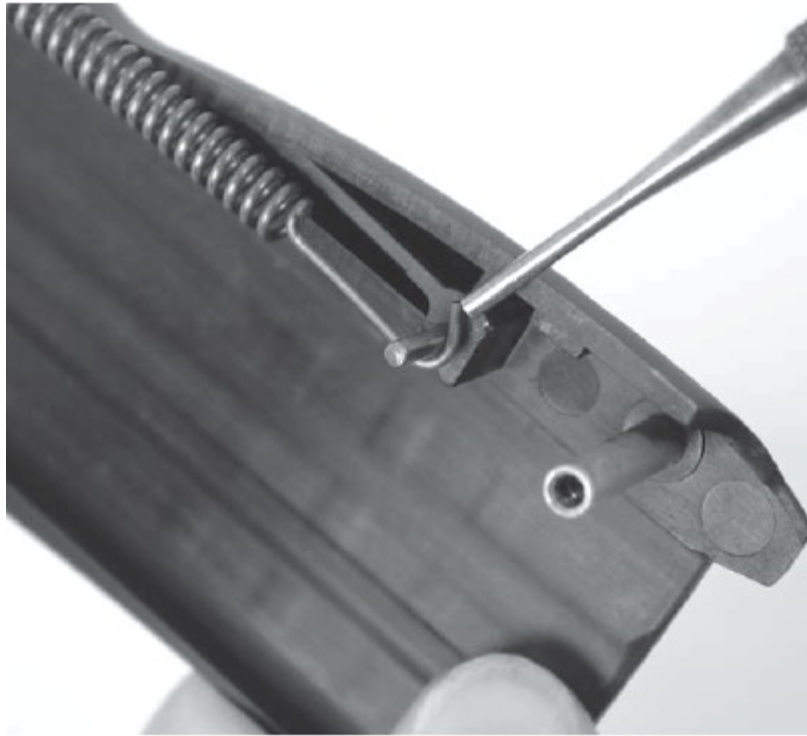
- 12.** Remove the six remaining cap head screws from the right side.
Note: The screw directly above the trigger is longer than the others.



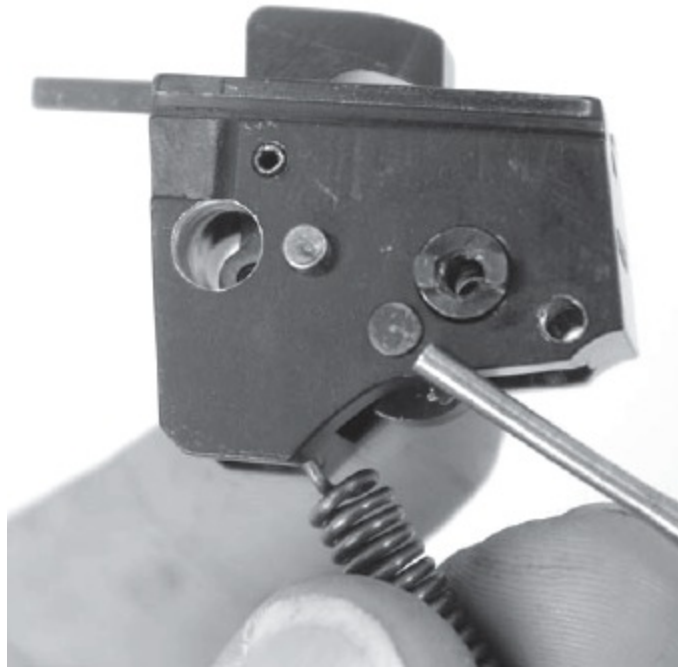
- 13.** Remove the two button head screws from either side of the rear of the grip to release the frame containing the hammer and sear.
Note: The right side screw is shorter than the left side screw.



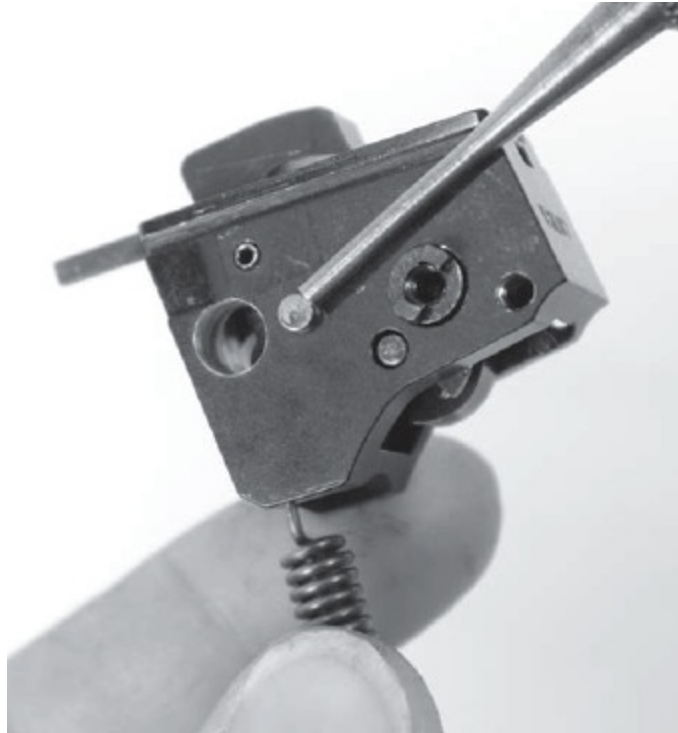
- 14.** The two grip halves can now be separated slowly and gently. The slide stop can be removed from the left side, since it has probably just fallen out.



- 15.** The hammer spring catch is a pin which holds the hammer spring hook. The hammer spring is quite powerful so use a pair of pliers or hollow end punch to remove it from the pin.



- 16.** Press sear axis out to release the sear. The safety can also be removed at this time. *Take care, as the sear spring and the safety snap are under tension.* **Note:** When reassembling, the pin must go in from the left side.

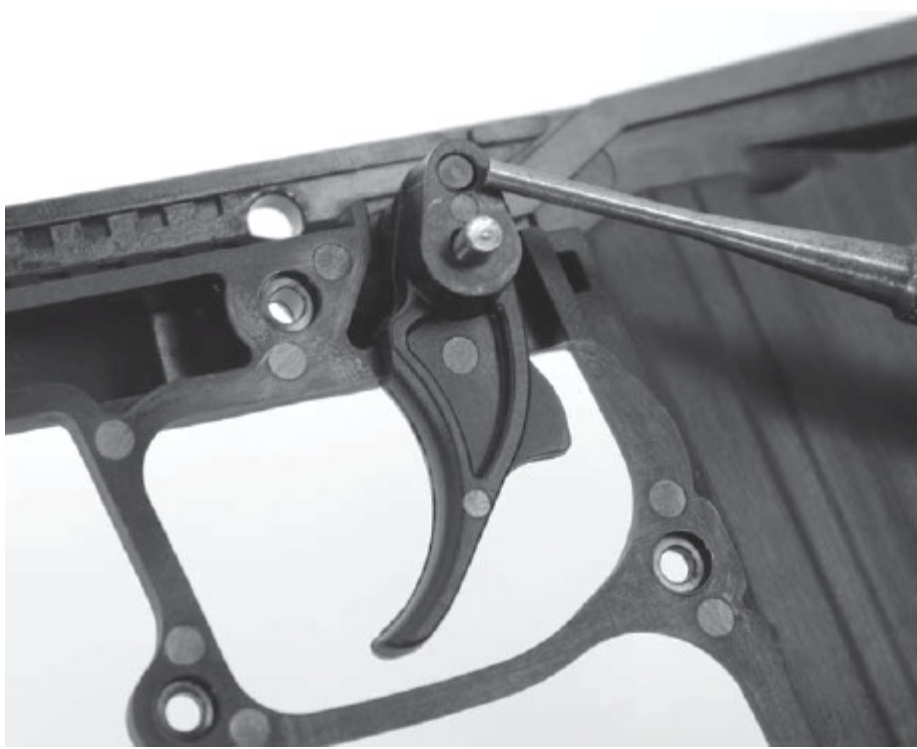


17. Remove the axis pin to free the hammer.



18. The feed ramp can be lifted from the frame. Note that the slide stop spring is embedded in the front of the feed ramp, with one

leg protruding into the slide stop, which is sandwiched between the feed ramp and the left grip.

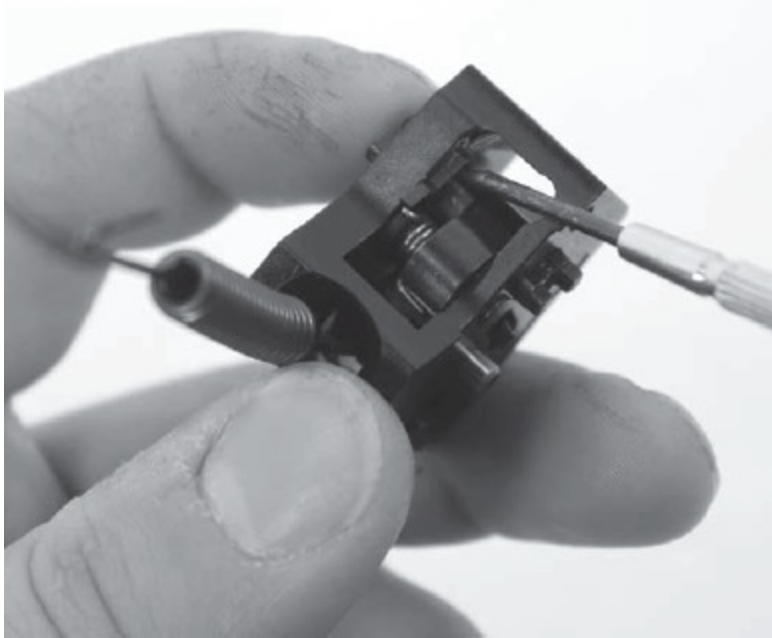


19. The trigger, trigger bar, trigger spring, and trigger axis can now be removed from the frame.

Reassembly Tips:



1. Use a slave pin to reinstall the sear, sear spring, and the safety snap. The hammer should be installed first, then the sear assembly with slave pin. Cock the hammer and then use a small tool to pull the safety snap down while the safety is inserted into the frame. The safety cannot be inserted in this manner if the hammer is not cocked.



- 2.** Use a tool, such as a pliers or the hollow end of a pin starter punch, to pull the hammer spring hook down over the hammer spring catch.

Lahti (Swedish)

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Lahti also apply to the following gun:
Finnish Lahti



Data: Swedish Lahti

Origin: Sweden

Manufacturer: Husqvarna
Vapenfabriks,
Husqvarna

Cartridge: 9mm Luger

Magazine capacity: 8 rounds

Overall length: 9¹/₂ inches

Height: $5\frac{5}{8}$ inches

Barrel length: $4\frac{7}{8}$ inches

Weight: 44.6 ounces

This pistol was designed in Finland, and was adopted for military use there in 1935. In 1940, slightly modified, it was adopted by Sweden. The small mechanical differences, mainly in the recoil spring and the accelerator, will cause no takedown difficulties.

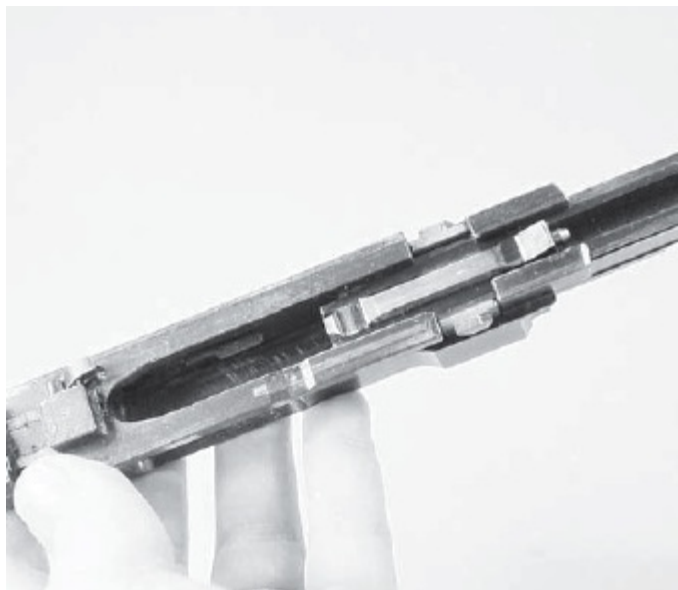
Field Strip:



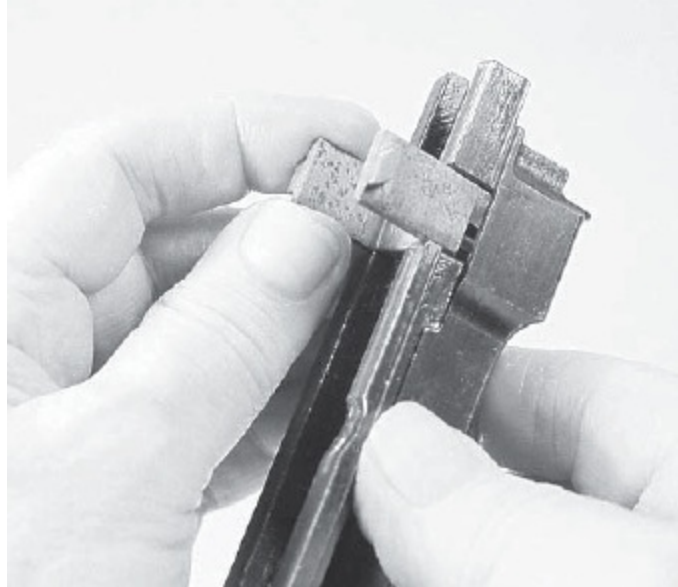
1. With the internal hammer cocked and the magazine removed, move the barrel assembly rearward until it stops, and turn the takedown lever downward.



2. Move the barrel and bolt assembly forward off the frame.



3. Invert the barrel assembly, and take out the bolt.

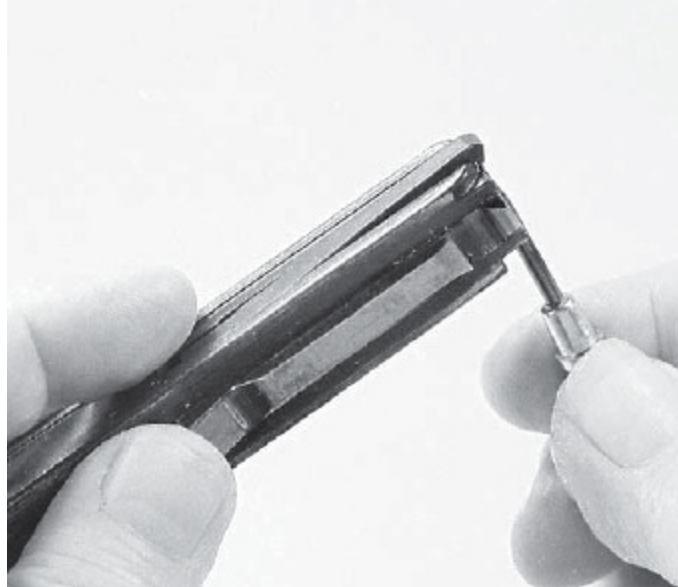


4. Lift out the bolt locking piece.

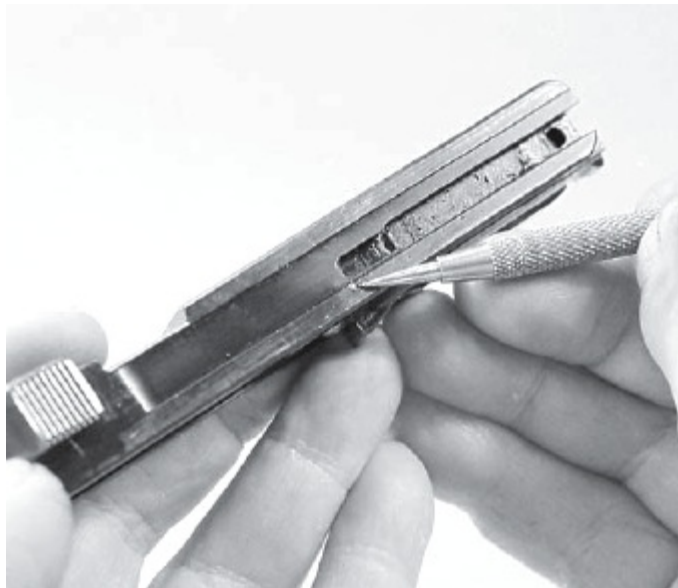


Lahti field-stripped

Detail Strip:



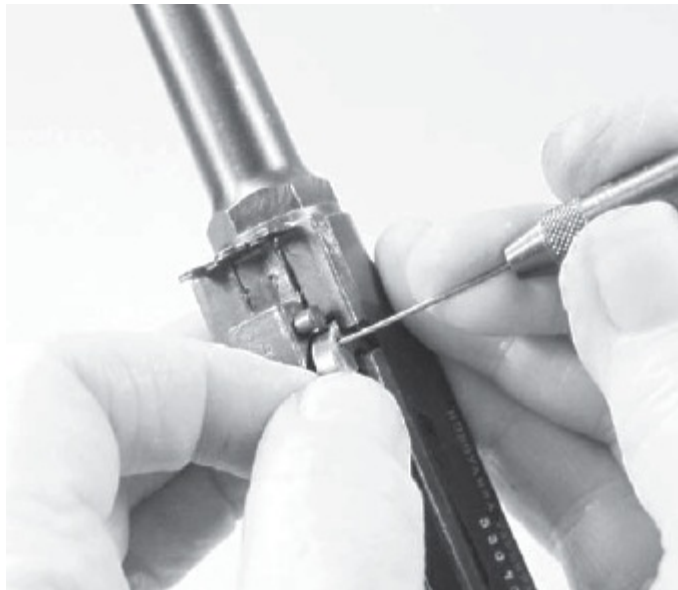
- 5.** With a tool under the beak of the extractor, lift it just enough to clear its underlug, and move it out toward the front.



- 6.** Drift out the firing pin cross-pin.



7. Remove the firing pin and its return spring.



8. Insert a small-diameter drift (or an opened paper-clip) into the hole in the accelerator to depress the retaining plunger, and turn the accelerator downward and rearward.



9. As the accelerator is removed, control the plunger and spring.



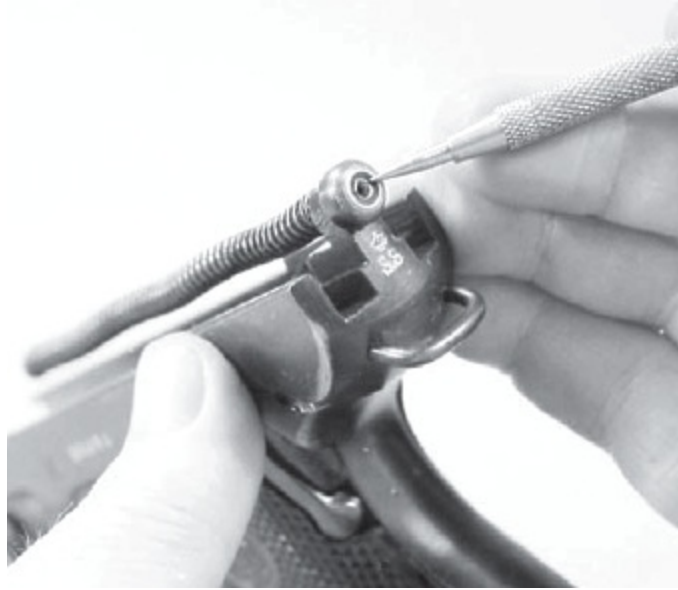
10. Remove the accelerator plunger, and use a tool to extract the small coil spring. Take care that these small parts are not lost. The large pin beside the accelerator retains no part, and is not removed.



- 11.** To remove the ejector, insert a tool inside the barrel extension to push its rear locking lug very slightly out of its recess, and push the ejector forward. It can then be taken off toward the left. If removal is not necessary for repair or refinishing, leave it in place.



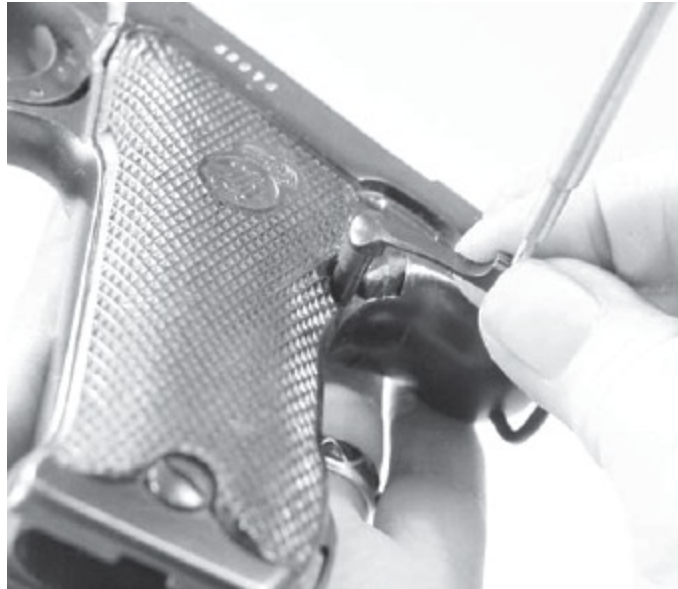
- 12.** The rear sight is integral with the barrel extension. The front sight can be removed by drifting it out of its dovetail toward the right.



- 13.** The recoil spring assembly is heavily riveted in place at the rear, and it is not removed in normal takedown. Removal would require drilling out the riveted end. The guide would then have to be replaced, or cut off and changed to the Finnish pattern.



- 14.** Into the hole in the safety lever, insert a drift that will fit snugly. Use the drift to pry the lever very gently outward, just enough to clear the stop pin at the rear, and turn it downward.



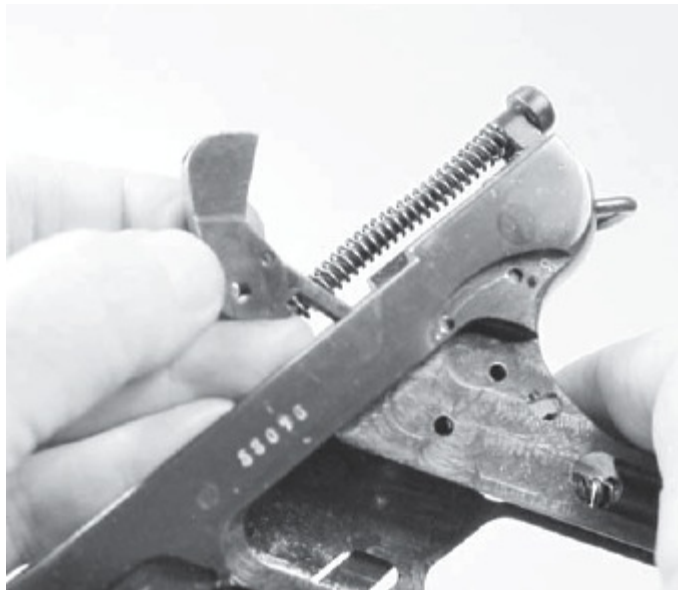
- 15.** When the safety lever reaches the position shown, it can be lifted out of the frame. Remove the screws at the lower edges of the grip panels. Tip the grips outward at the bottom, and take them off downward.



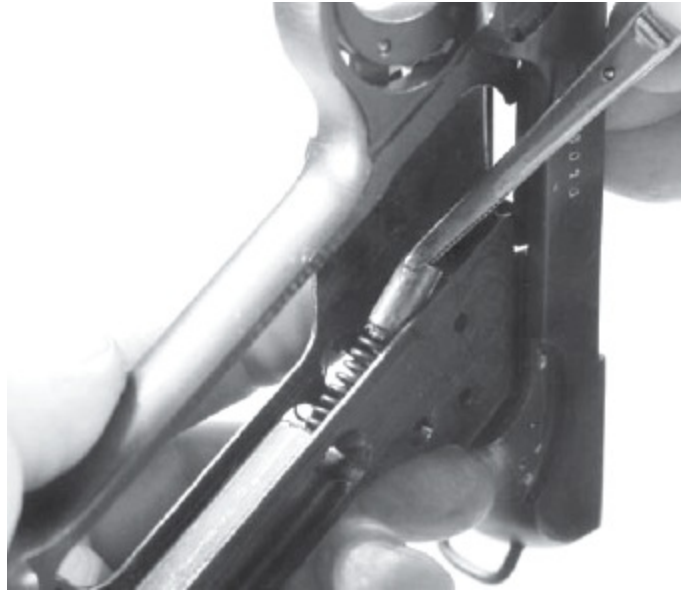
- 16.** Restrain the hammer, pull the trigger, and ease the hammer down to fired position. Drift out the sear pivot.



- 17.** Restrain the hammer at the top, with slight rearward pressure, and drift out the hammer pivot.



- 18.** Remove the hammer and its attached strut. The strut can be removed from the hammer, but its cross-pin is riveted, so this should be done only for repair.



19. Remove the hammer spring and plunger.



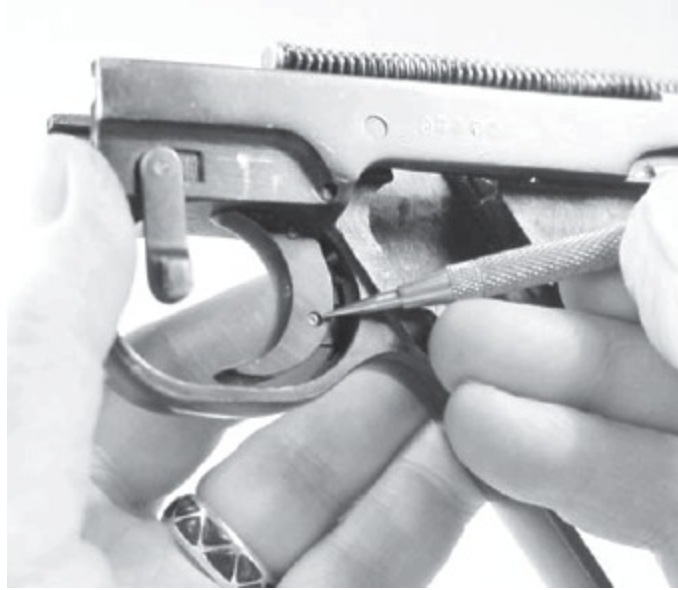
20. Move the trigger bar downward to release the sear, and remove the sear and its spring.



- 21.** Disengage the spring from its groove in the underside of the trigger bar, and rotate it out of the way.



- 22.** If necessary for repair, the spring can be removed from its mount by threading it out in key-ring fashion. If it does not have to be taken out, leave it in place.



- 23.** Support the trigger, and drift out the trigger bar pin. This pin is riveted, so remove only if necessary. Move the trigger bar rearward, then take it off toward the right. Remove the disconnecter downward.



- 24.** Drift out the trigger cross-pin.



- 25.** Turn the trigger forward into the trigger guard space for removal.
A cross-pin in the trigger retains the torsion-type trigger spring.



- 26.** With the takedown lever in its open position, use a non-marring tool to nudge it out toward the left.



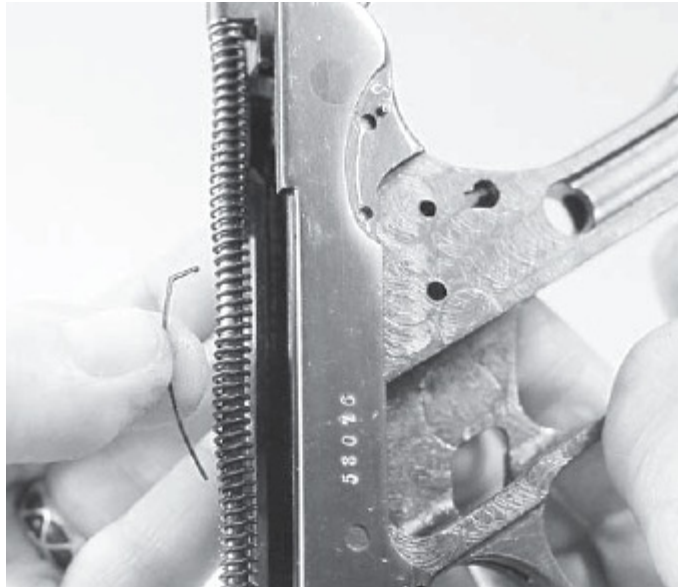
- 27.** When the takedown lever has been removed, its detent spring can be taken out by drifting its mounting end out rearward.



- 28.** Drift out the magazine catch cross-pin, and remove the catch and its torsion-type spring downward.



- 29.** To remove the hold-open latch, first use a very small drift to move the tail of its spring out upward. The tail is angled slightly forward, and it is often staked in place. This is another of those parts that should be removed only if necessary.

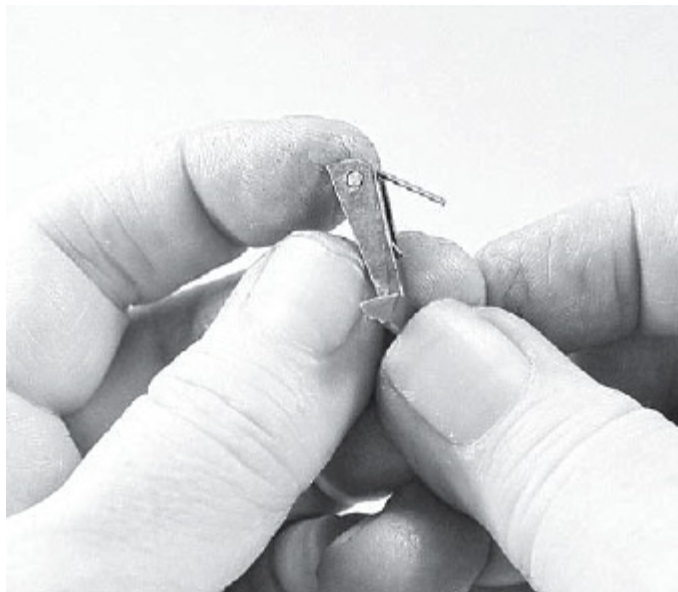


- 30.** Remove the hold-open latch spring.



31. Turn the hold-open latch up to the position shown, move it to the right, and take it out.

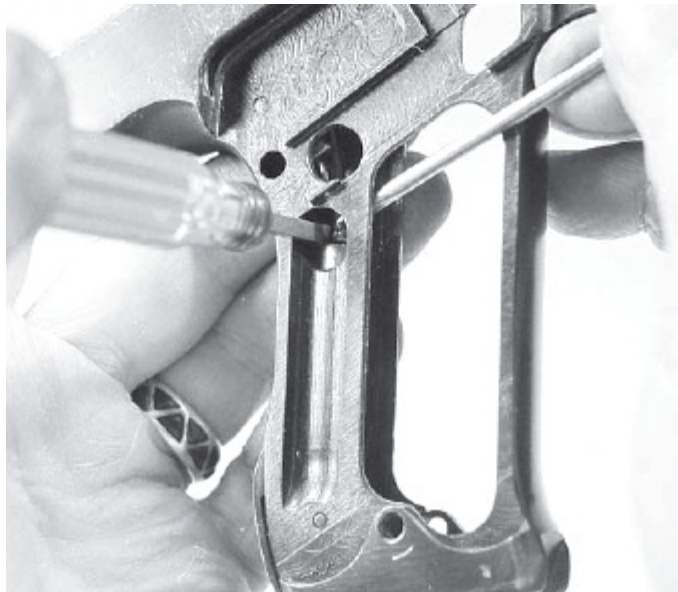
Reassembly Tips:



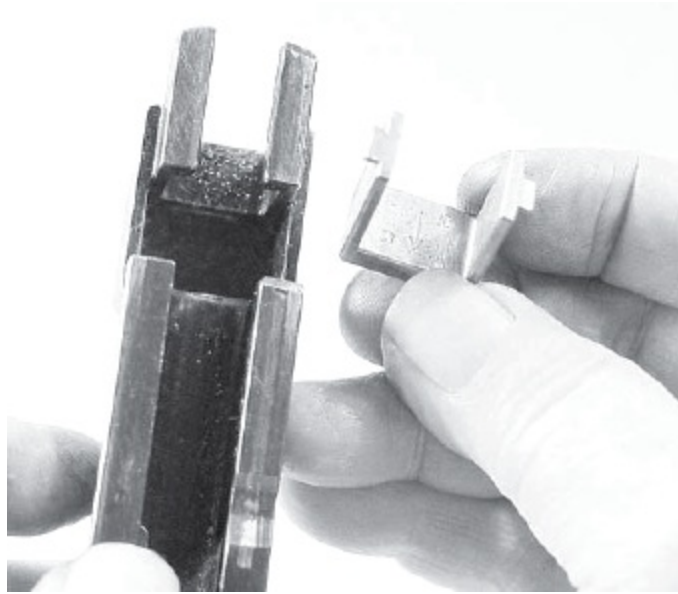
1. When installing the magazine catch, it will be necessary to use a slave pin to keep the spring positioned while replacing the cross-pin.



- 2.** For illustration purposes, the sear is shown here in its proper orientation. Be sure the sear spring enters its recess in the frame.



- 3.** After the hammer is re-installed, a tool can be used to depress and hold the plunger while the strut is swung rearward to engage it. Note that a reversal of this operation can be used during the takedown, disengaging the strut before the hammer is taken out. However, you must be very careful. If the tool should slip, the parts may be damaged.



4. When replacing the locking block, note that the arrow stamped inside must point toward the front.

Luger



Data: Luger (Pistole
Parabellum)

Origin: Germany, Switzerland

Manufacturer: DWM, Mauser, and other
commercial factories
and government arsenals
in Germany. The Swiss
government arsenal
in Bern.

Cartridge: 9mm Parabellum,

7.65mm Parabellum

Magazine 8 rounds

capacity:

Overall length: $8\frac{3}{4}$ inches

Height: $5\frac{7}{16}$ inches

Barrel length: Varies, standard military
version is 4 inches

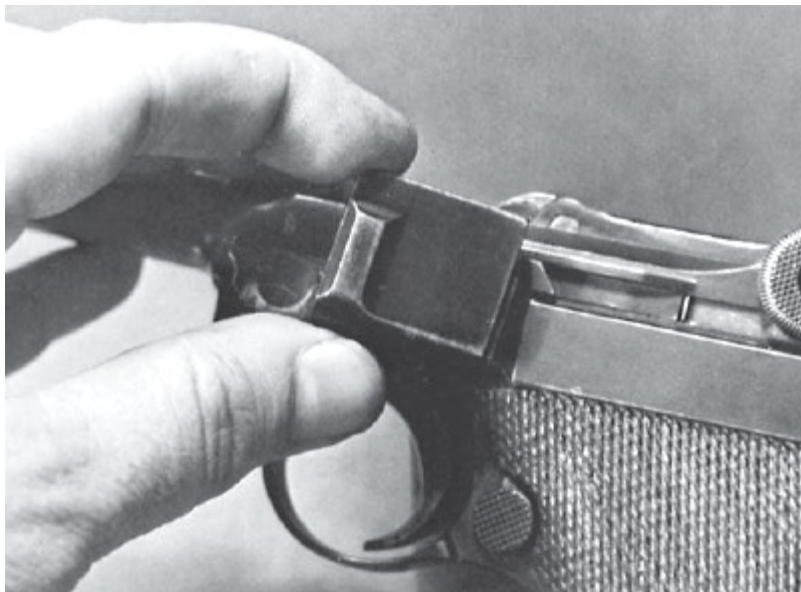
Weight: 30 ounces

Anything said here about the legendary Luger is likely to be redundant and unnecessary. For those who came in late, the gun was based on an earlier design by Hugo Borchardt, refined and perfected by Georg Luger, and used as the military standard sidearm by Germany from 1908 to 1939. It was used for an even longer period by the Swiss, and had both military and commercial sales in all parts of the world. In recent years, Mauser of Germany put the Luger back into production for a limited time, and these guns have a “Swiss-style” grip safety. Very early Lugers will have a flat recoil spring and other differences, but those are rarely seen outside of collections.

Field Strip:



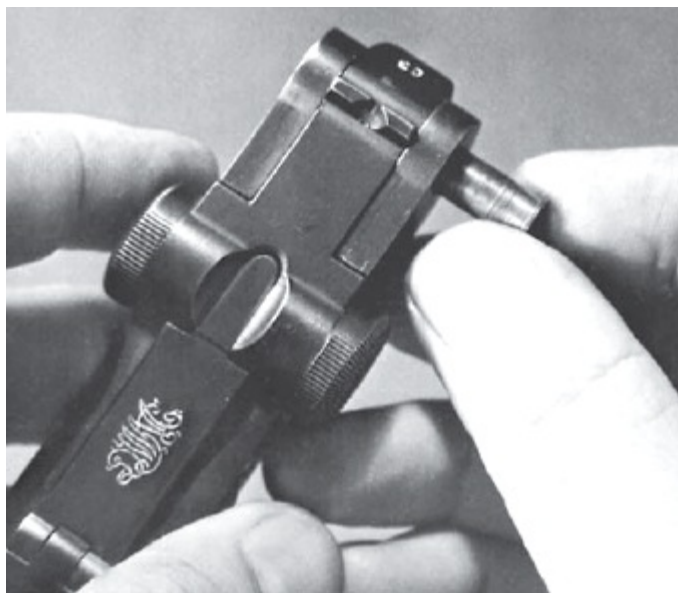
1. Move the barrel and bolt assembly toward the rear until the toggle knobs touch the ears at the rear of frame, and turn the takedown lever on the front left of the frame down to the vertical position.



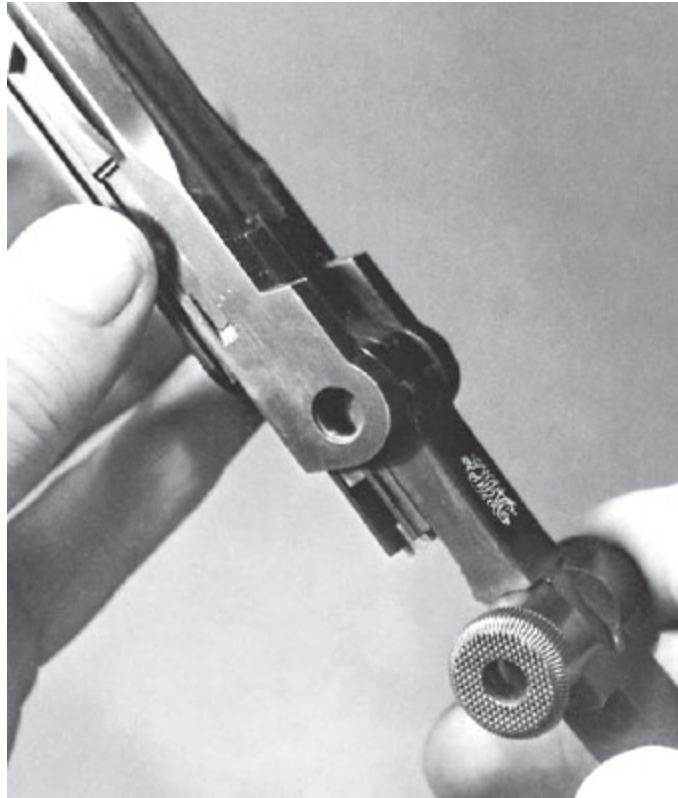
2. While holding the barrel and bolt assembly, lift the sideplate above the trigger at its front, move it forward to free the rear flange, and remove it from the frame.



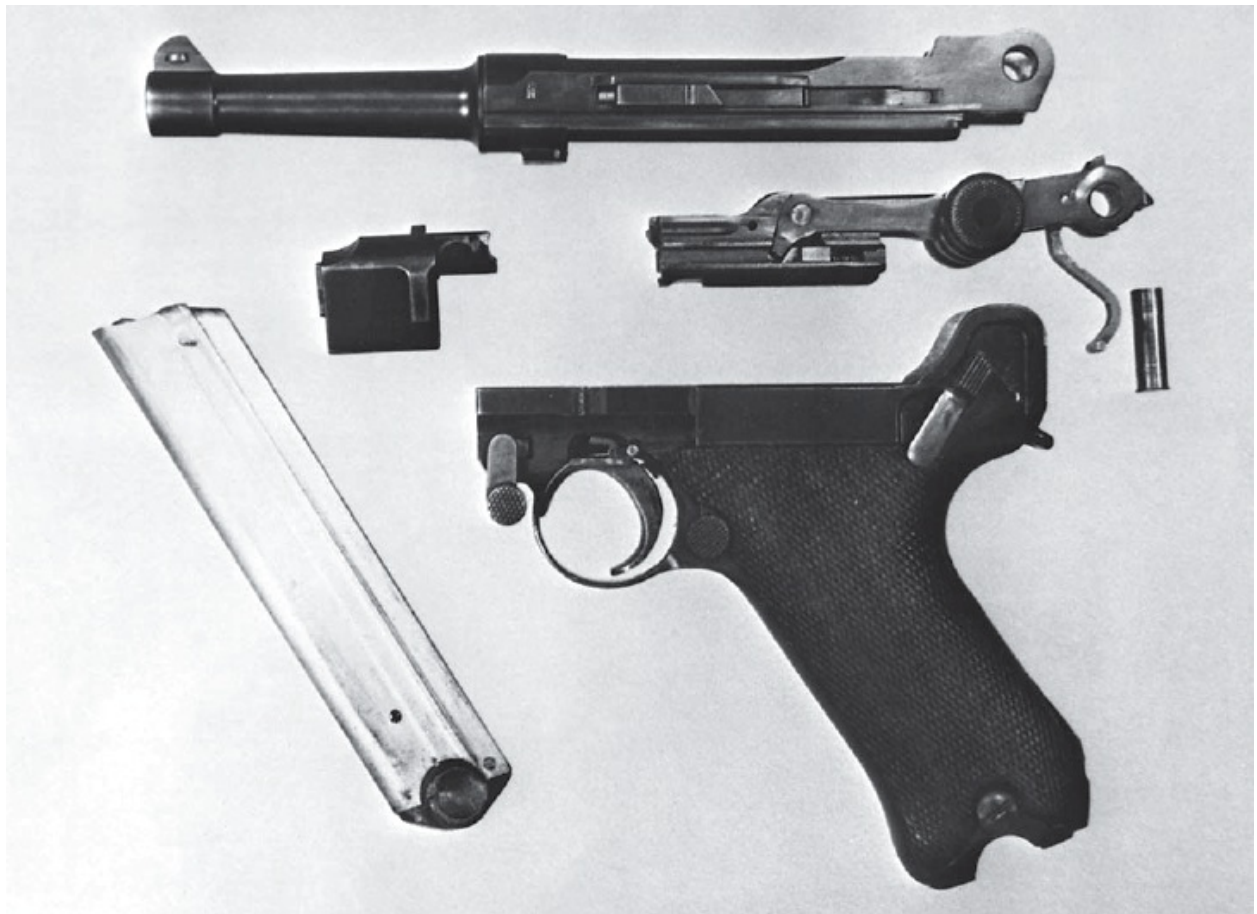
3. Run the barrel and bolt assembly forward off the frame.



4. Remove the large cross-pin at the rear of the barrel extension to release the toggle and breechblock assembly.

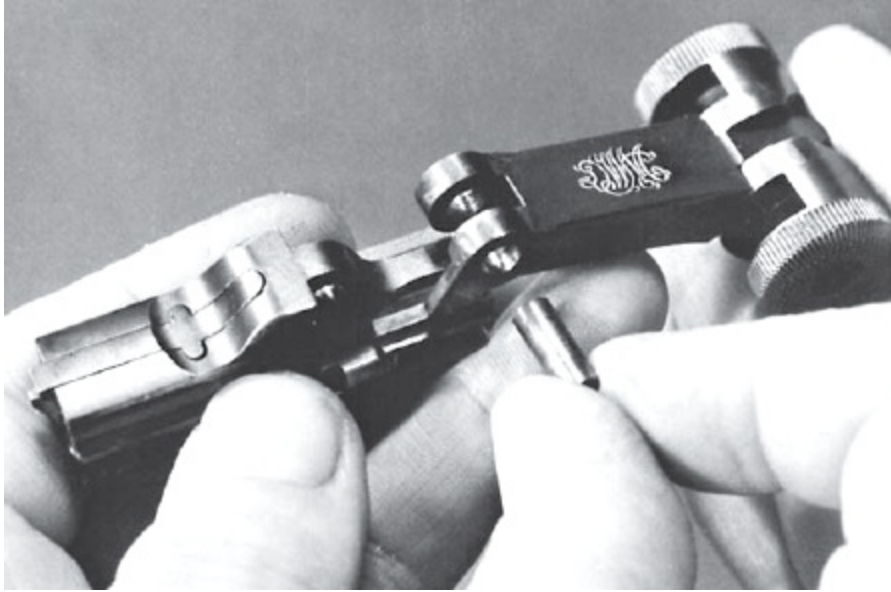


5. Slide the breechblock and toggle assembly out of the rear of the barrel extension. **Gun is now field-stripped.**

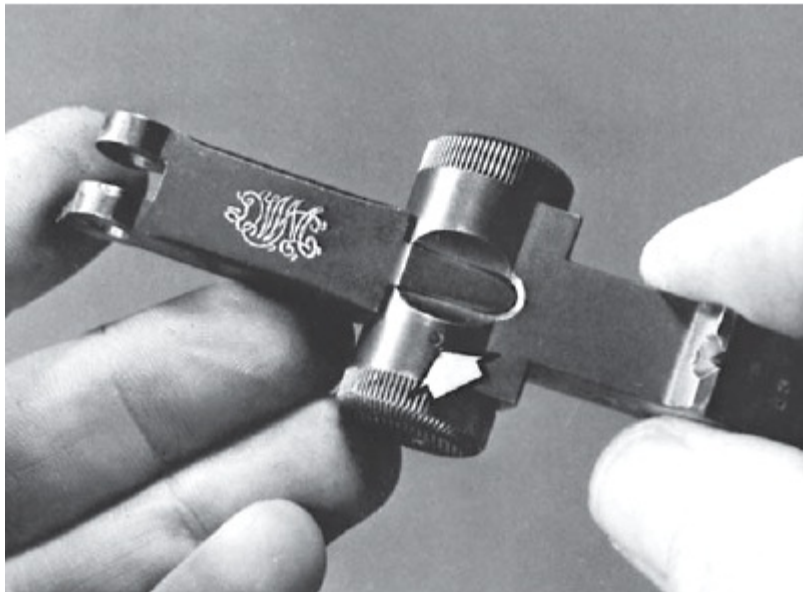


Luger field-stripped

Detail Strip:

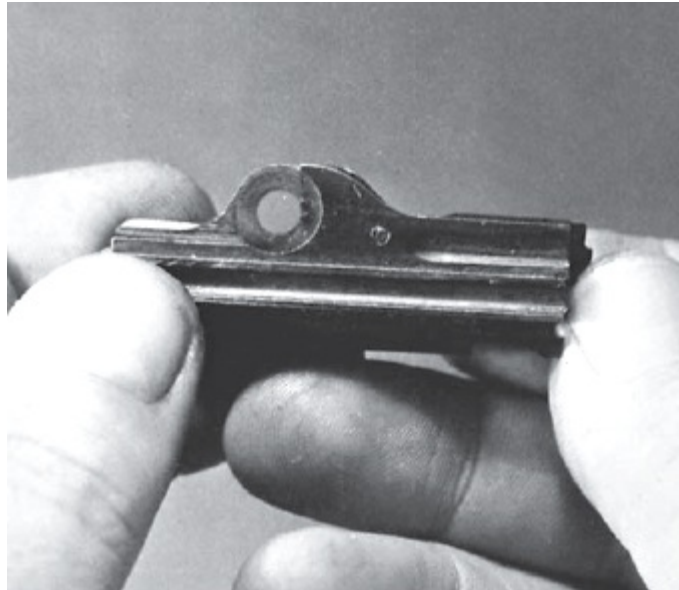


6. Remove the front cross-pin of the toggle assembly to free the breechblock for removal. **Note:** In some cases, this pin will be very tight. It should not be forced as this will likely cause deformation or breakage of parts.

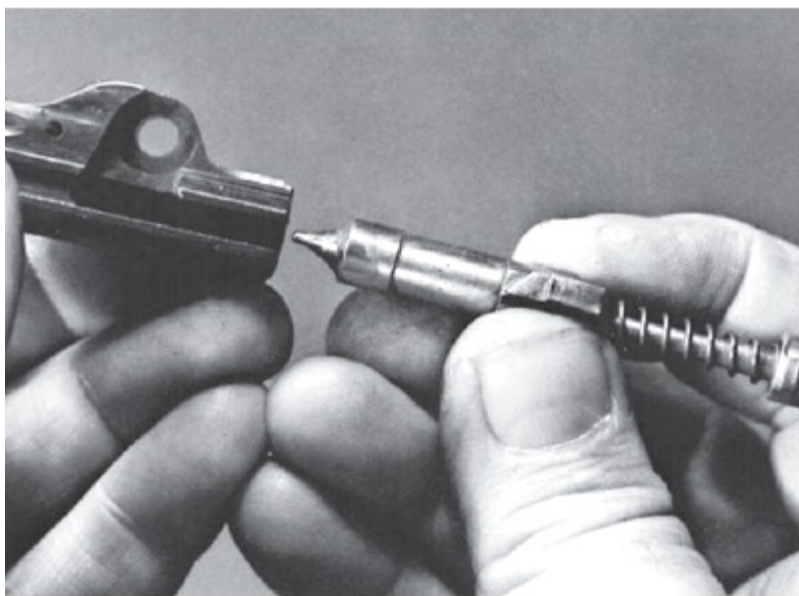


7. On top of the toggle knob piece, on the left side, a small pin is visible (arrow). This must be driven up, from the underside of the toggle, to free the large center pin of the toggle assembly. The large pin is then pushed out to the left. Unless takedown of this

system is for refinishing, complete removal of the small pin is not necessary. Drifting out the small cross-pin at the rear of the toggle knob unit will allow removal of the S-shaped coupling link from the underside.

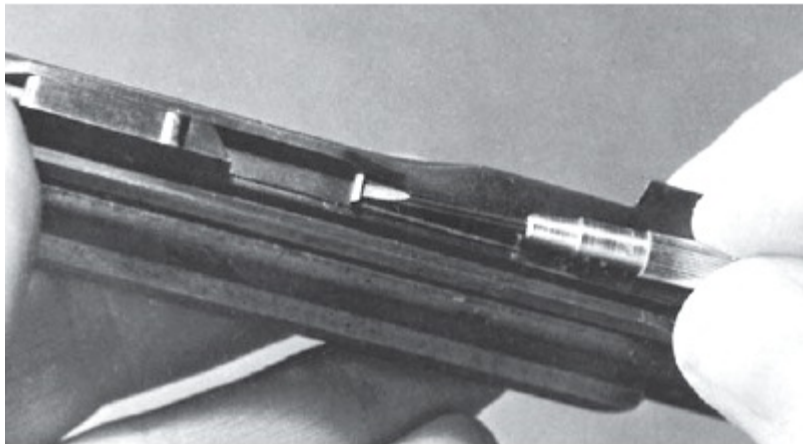


- 8.** Drifting out the small cross-pin in the breechblock will release the extractor and its spring for removal.

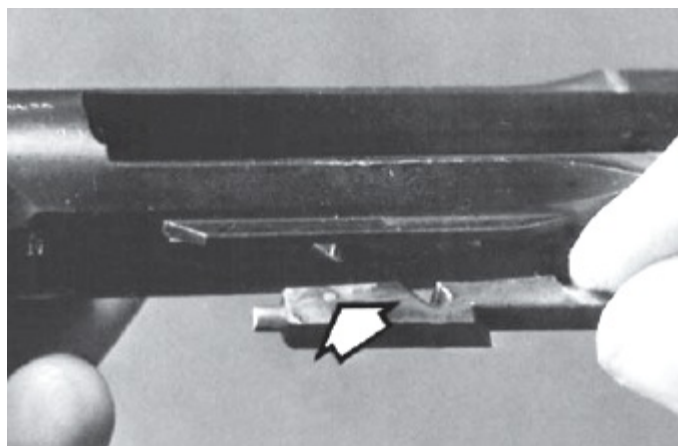


- 9.** With a screwdriver or Luger takedown tool, push in the firing pin

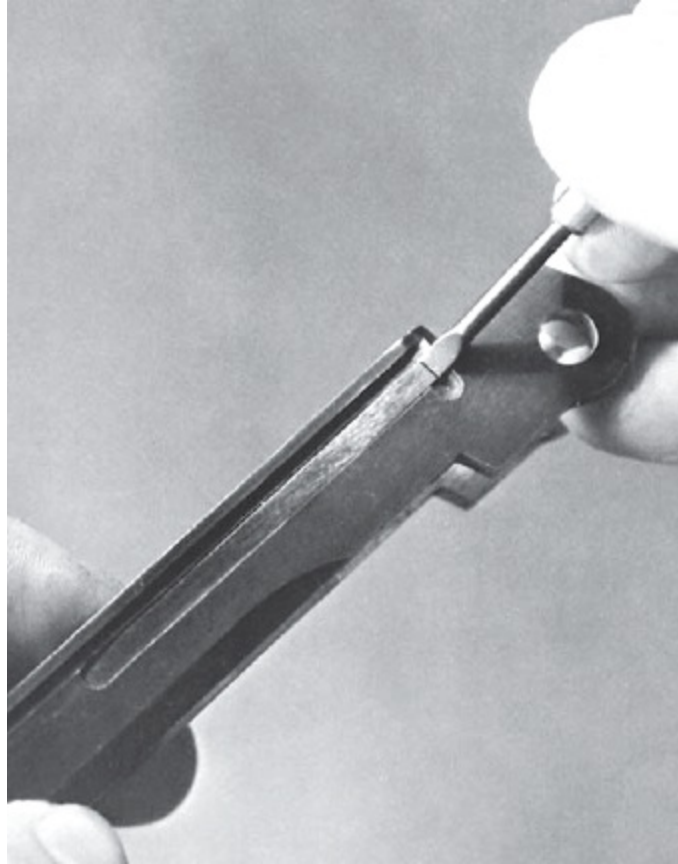
spring guide and retainer at the rear of the breechblock and turn it to the left until its lug aligns with the open track in the side of the breechblock. Ease the guide out to the rear, along with the spring and the striker (firing pin).



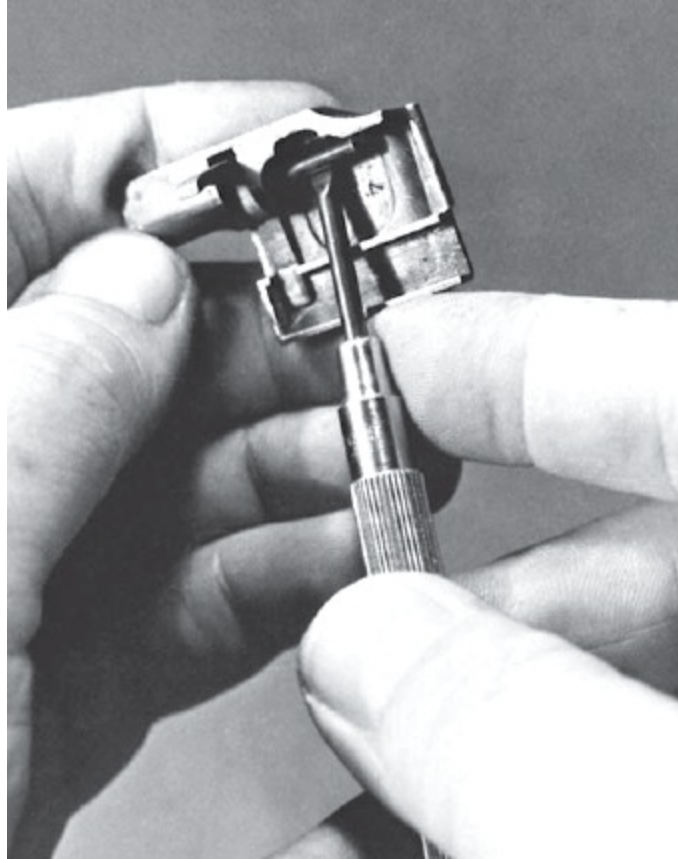
- 10.** With a small screwdriver, lift the hooked end of the sear spring just enough to clear the step on the sear tail, and slide the spring forward to remove it.



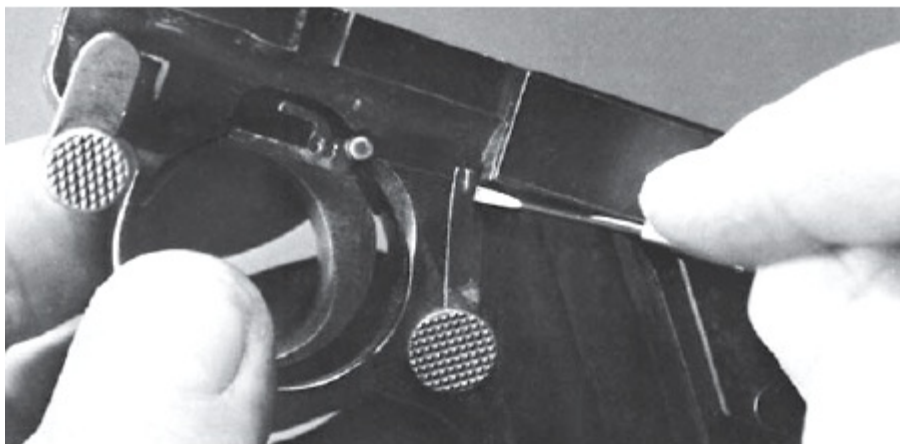
- 11.** Remove the sear assembly from the left side of the barrel extension. Drift out the small pin (arrow) near the front of the sear will release the disconnecter plunger and its spring for removal.



- 12.** With a small screwdriver, gently lift the rear tip of the ejector until its retaining plug is free of its recess in the barrel extension, and remove it. **CAUTION:** *More of these are broken by careless disassembly than in use. Lift it **only** far enough to free it.*



- 13.** To remove the trigger lever from the sideplate, use a small screwdriver to pry its pivot tail away from the wall of the sideplate, then move the pivot out toward the rear of the plate.



- 14.** Use a small screwdriver to slightly depress the upper end of the magazine catch spring, and push the spring forward from

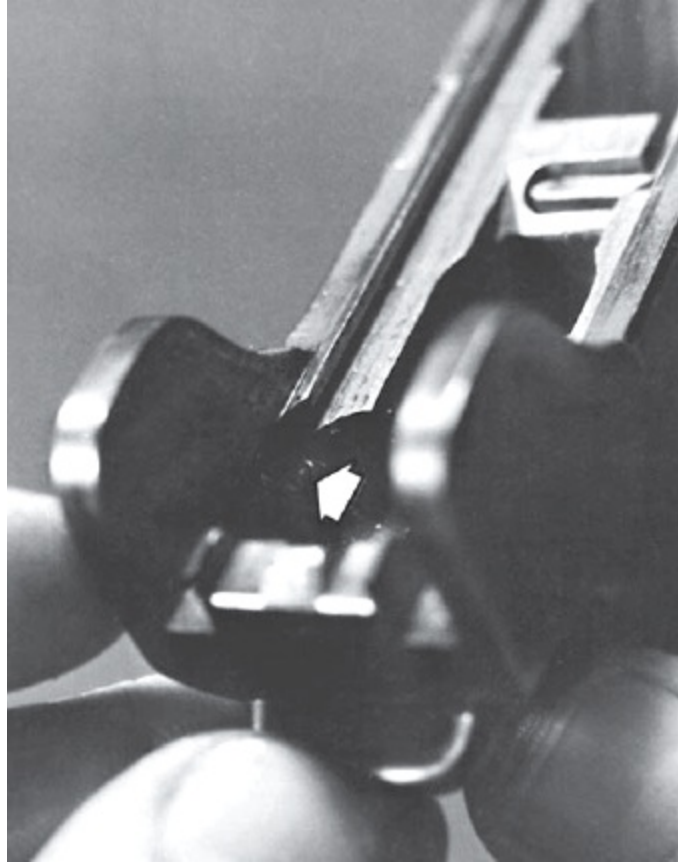
beneath its shelf in the frame. Removal of the spring will free the magazine catch.



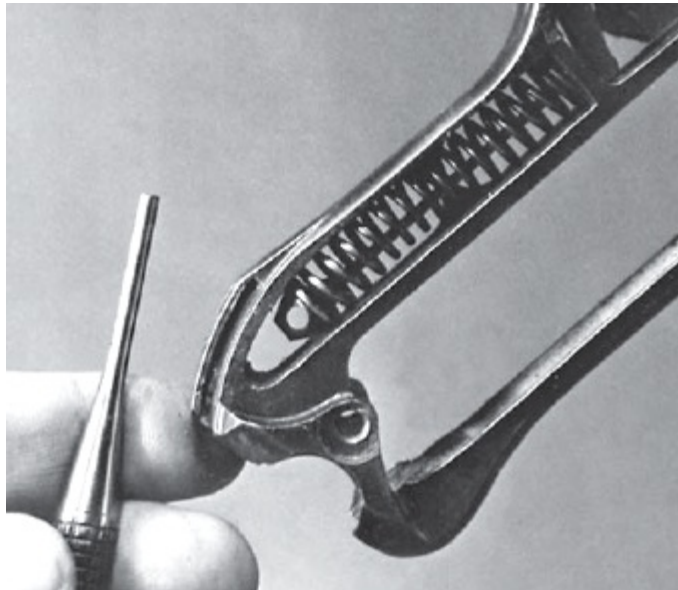
- 15.** Remove the magazine catch from the right side of the frame. The takedown-lever can be pushed from the right side of the frame and removed toward the left. The tip of its retaining and positioning spring can be drifted inward from the front underside of the frame for removal.



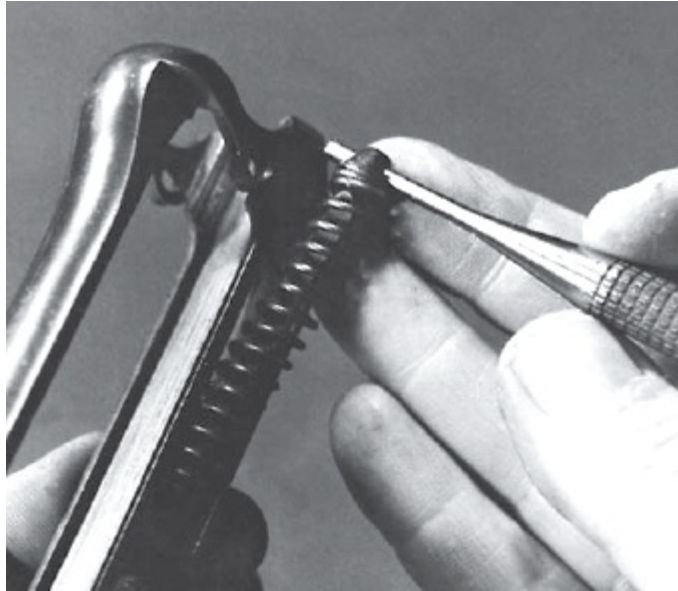
16. The trigger may easily be moved to the left and taken out of the frame, along with its attached spring. To remove the hold-open device and its spring, push it upward from within the frame only enough to clear its rear edge, and pull it straight toward the rear for removal. Do **not** pull it upward, or the spring will be broken.



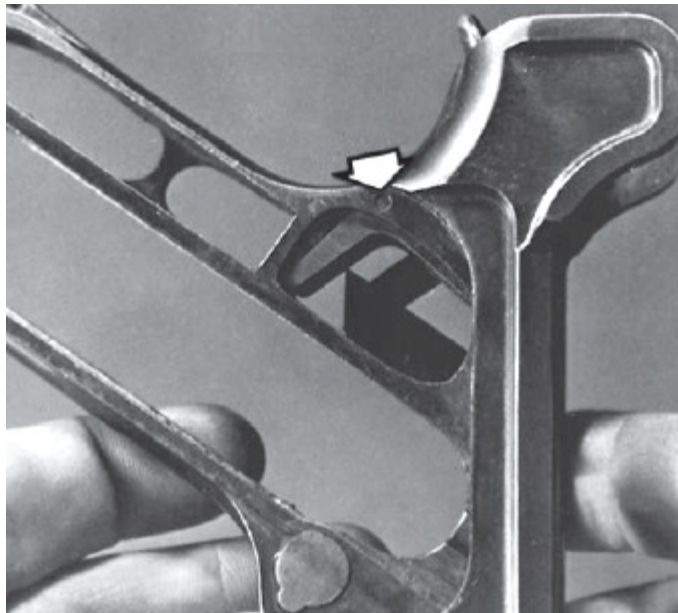
17. Driving out a small pin located inside the left rear of the frame will free the safety-lever and safety bar for removal.



- 18.** Insert a drift of the proper size into the hole in the lower end of the recoil spring guide, working from the right side of the frame.



- 19.** Push the recoil spring up (toward the top of the frame) to free the lever from the hook on the spring guide, then ease the spring and guide out toward the right for removal. **CAUTION:** *The recoil spring is under some compression, even at rest, so take care that it doesn't get away.*



20. Driving out the cross-pin at the upper rear of the frame will free the recoil lever for removal.

Reassembly Tips:

When sliding the barrel and bolt assembly back onto the frame, be sure the coupling link (the S-shaped piece at lower rear of the bolt assembly) falls in front of the upper arm of the recoil lever in the frame.

For replacing the ejector, position it in its slot in the barrel extension, and push it straight in until it clicks into place. Use fingers, not tools.

When replacing the safety-lever, exert inward pressure at its pivot point while inserting the retaining pin.

Be sure the trigger lever pivot is all the way forward in the sideplate before trying to turn it back into the locked position.

When sliding the bolt assembly (breechblock and toggle links) back into the barrel extension, press on the sear to allow the striker to remain in the fired position.

Magnum Research Micro Desert Eagle



Data: Magnum Research Micro
Desert Eagle

Origin: United States

Manufacturer: Magnum Research, Inc.
Minneapolis, MN

Cartridge: .380 Auto

Magazine capacity: 6 rounds

Overall length: 4.52 inches

Height: 3.71 inches

Barrel length: 2.22 inches

Weight: 14 ounces

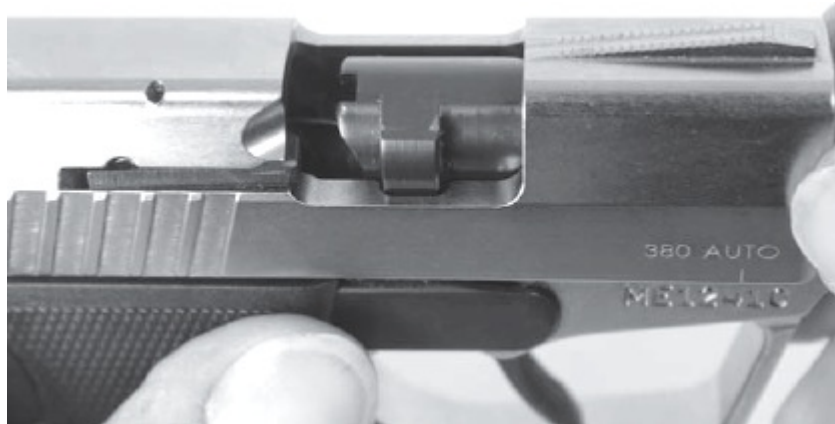
Joining its big brothers the Desert Eagle and the Baby Desert Eagle, the Micro Desert Eagle appeared in 2009. A very small .380 Auto pistol, it has the distinction of having no manual safety or slide stop to increase its width. Easily a pocket pistol, it still has some weight to keep recoil manageable, and can be purchased with a blued slide or nickel plated slide. To delay the blowback action of the slide, the pistol makes use of its own gas generated by the firing of the cartridge.

Field Strip:



1. With the magazine removed, push the slide back approximately

1/4 of an inch until the slot of the slide lines up with the barrel.



2. With the slot and lug aligned, rotate the barrel so that the lug fully points up out of the ejection port. This will disengage the slide.



3. Pull the slide off the front of the frame. As you pull the slide off, grasp the two recoil spring assemblies, one each on either side of the frame. Once the slide is clear of the frame, the springs can be removed by lifting from their slots.

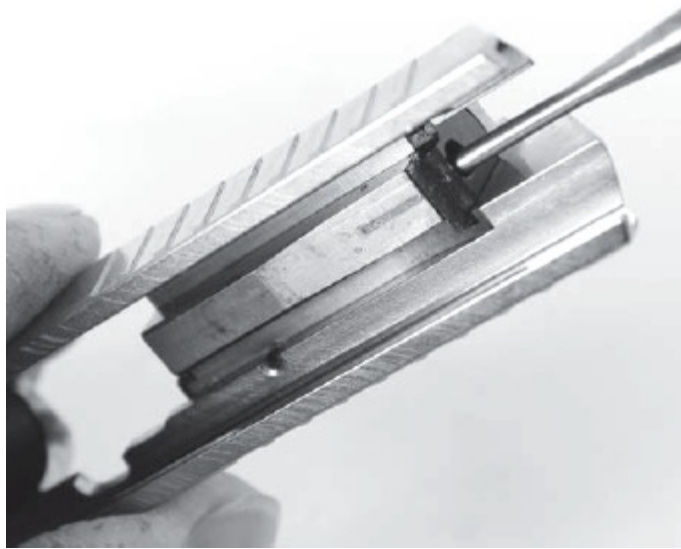


4. Tip the barrel up at the back and remove from the slide.



Magnum Research Micro Desert Eagle field stripped

Detail Strip:



5. Depress the firing pin into the slide and pull down on the firing pin stop. Removing the stop will remove the firing pin and firing pin spring.



- 6.** The firing pin and firing pin spring can now be removed from the slide. *The firing pin is under spring tension, so control it.*



7. Drive out this pin to remove the extractor and extractor spring.



8. Remove both grip screws and take both grip panels off the frame.



- 9.** Under the right grip panel rests the magazine catch spring. It is retained by the grip panel and grip panel screw. As the panel is removed the spring will be free to fall out.



- 10.** Push the magazine catch out to the right of the frame.



11. Lift up the trigger bar spring from the frame.



12. The pin on the back of the trigger bar has a grooved head which interacts with a slot inside the trigger. Remove the trigger bar by pushing it slightly forward against the trigger and lifting it from

the frame.



- 13.** The trigger bar spring is crimped into the trigger bar and should not be removed unless the spring is broken.



14. Push out the trigger pin from left to right.



15. Pull the trigger down, out of the frame, into the trigger guard area.



16. Push out the hammer spring pin. *The hammer spring is under tension. Use caution.*



17. Pull the hammer spring and its plunger from the frame.



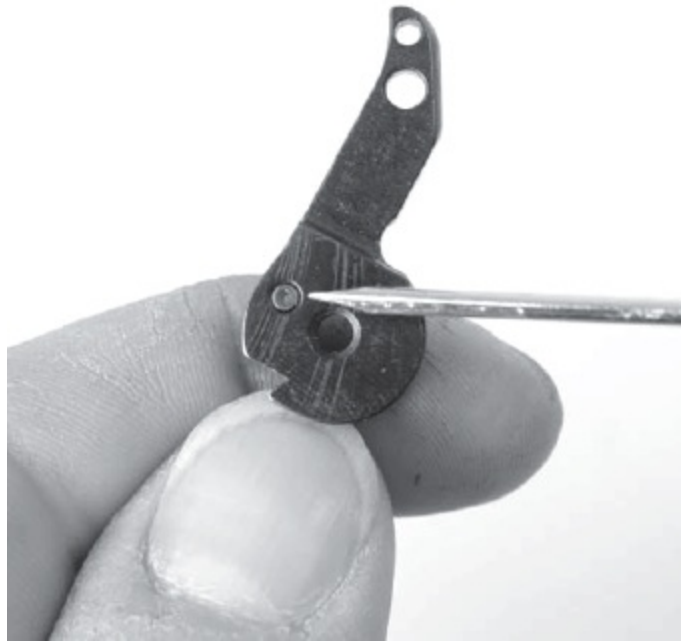
18. Press out the rocker pin from left to right.



- 19.** Remove the hammer by pulling it up and out of the frame. The hammer strut is not connected to the hammer and will fall out of the frame by turning the frame upside down.



- 20.** There are two pins that hold the ejector. Do not remove them unless the ejector needs to be replaced.

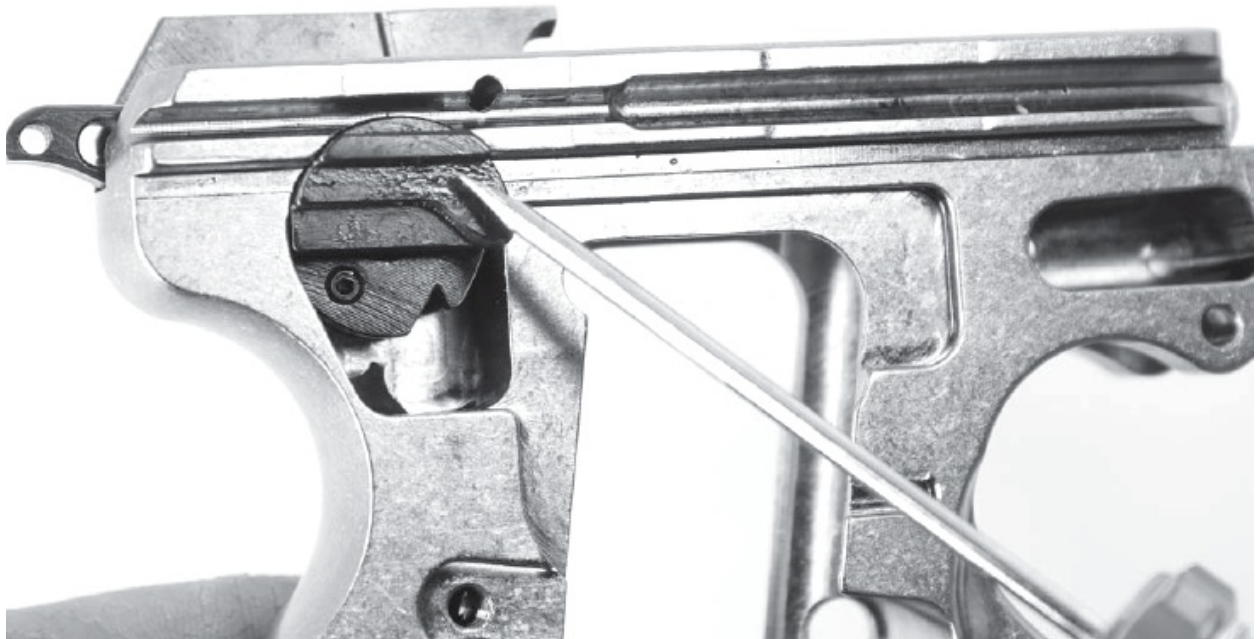


21. The hammer strut pin should not be removed unless it is damaged.

Reassembly Tips:



1. This is the orientation of the hammer strut to the hammer. When reinstalling the hammer, drop the strut in so that the hook of the hook leans to the rear.



2. When reinstalling the rocker pin make sure that the rail segment

of the rocker pin is perfectly lined up with the rail segment of the frame.

Makarov

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Makarov also apply to the following guns:

Russian

East German

Chinese versions



Data: Makarov

Origin: Bulgaria

Manufacturer: Arsenal Company,
Kazanlak

Cartridge: 9mm Makarov

Magazine capacity: 8 rounds

Overall length: 6¹/₄ inches

Height: 5 inches

Barrel length: 31³/₁₆ inches

Weight: 25.7 ounces

Designed by Nikolay Fyedorovich Makarov, this nice medium-frame pistol was adopted for military use by the U.S.S.R. in 1951. It was subsequently produced by factories in China, Bulgaria, and East Germany. The Bulgarian commercial version shown here has a squared trigger guard, but by all the makers the pistols are mechanically the same.

Field Strip:



1. With the magazine removed and the hammer cocked, turn the trigger guard downward and engage its edge with either side of

the frame to keep it in that position.



2. Pull the slide all the way to the rear, lift it up at the rear, and move the slide off toward the front.

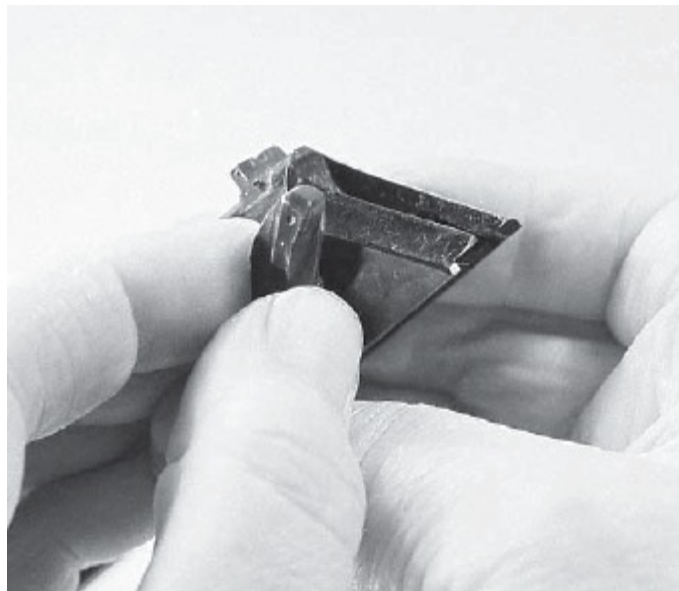


3. Turning it clockwise (front view), pull the recoil spring off the barrel.

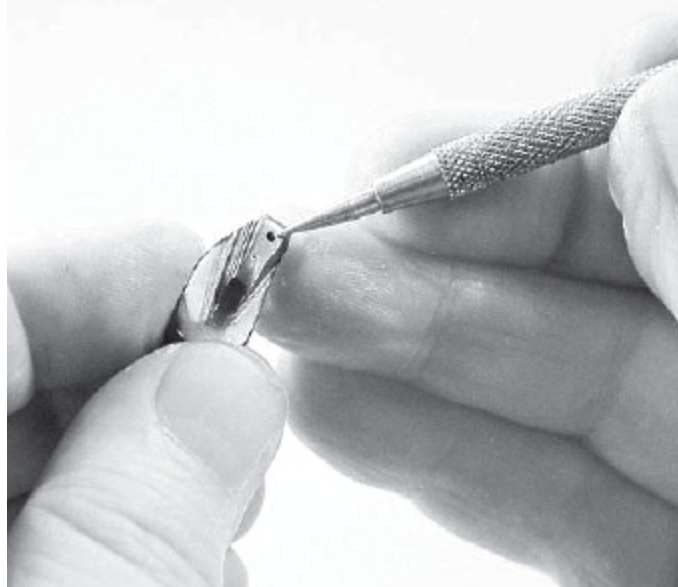


Makarov field-stripped

Detail Strip:



4. Turn the manual safety over to the rear, to the position shown, and remove it toward the left.



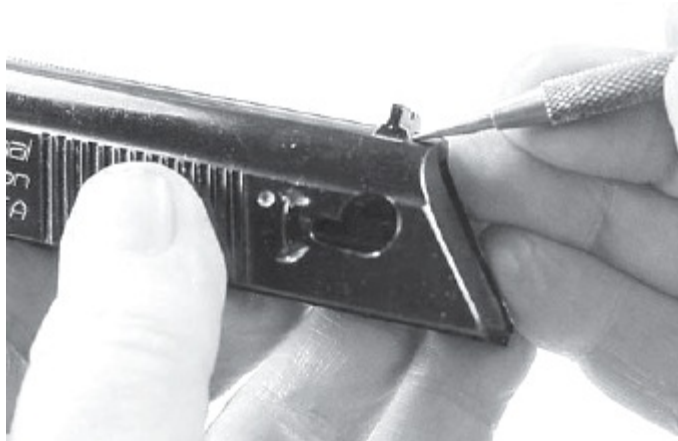
5. The safety detent spring is staked in place inside the lever, and is not removed in normal takedown. If necessary, it can be driven out via the aperture shown.



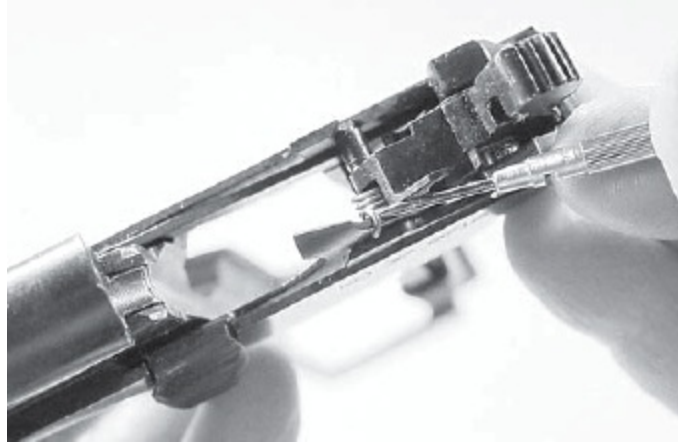
6. After the safety is removed, tilt the slide, and the firing pin will fall out at the rear. There is no firing pin return spring.



7. Insert a small tool in the opening at the rear of the extractor, and depress the plunger and spring rearward. Tip the extractor over toward the front for removal. **CAUTION:** *Keep the plunger and spring under control, and ease them out for removal.*



8. The rear sight is dovetail-mounted, and can be driven out of the slide toward the right. The front sight is integral with the slide.



9. Restrain the hammer, pull the trigger, and ease the hammer down to fired position. Remove the large screw at the back of the grip, and slide the grip off toward the rear. These are often very tightly fitted, and may have to be nudged with a wood block or some other non-marring tool. Use a small tool to unhook the sear spring from the slide latch.



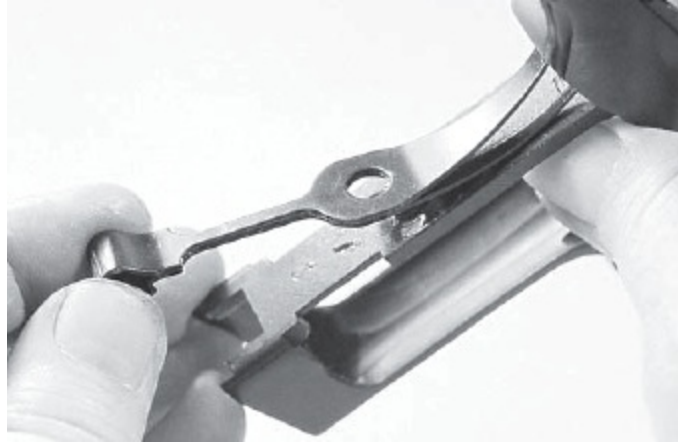
10. Turn the sear over forward until the right-hand end of its pivot aligns with the exit cut in the frame.



- 11.** Remove the sear, sear spring, and slide latch. The parts are easily separated.



- 12.** Push the mainspring retainer downward, and remove it. Sometimes tightly fitted, it may require a nudge from a non-marring tool.



13. Remove the mainspring.



14. Push the trigger forward, and turn the hammer over forward until its pivots align with the exit cuts in the frame. Remove the hammer forward and upward.



- 15.** Pull the trigger to the rear. Move the rear end of the trigger bar slightly inward, lift it at the rear, and take it off toward the right.



- 16.** The cocking lever pivot is riveted on the trigger bar, and it is not routinely removed.



- 17.** Prop the trigger guard open, as was done during field-stripping. Move the trigger toward the front, and remove it downward.



- 18.** Removal of the trigger guard will require a padded C-clamp, engaging the bottom rear of the guard and the top of the barrel housing. With slight pressure applied, the guard hinge pin is easily pushed out. This pin is stepped, with a smaller portion at center, and any attempt to simply drive it out will cause damage. If the pin is removed, ease the C-clamp pressure slowly, and take out the trigger guard plunger and spring.



- 19.** Removal of the barrel, not done in normal takedown, begins with drifting out this cross-pin. The barrel is then taken out straight to the rear, using a special press tool or a hardwood block and mallet.

Reassembly Tips:



- 1.** When installing the mainspring, be sure the larger arm goes

inside the hammer, and the smaller arm against the cocking lever, as shown here.



- 2.** The shelf at the rear of the firing pin must be on the left, to mate with the safety.

Mauser HSc



Data: Mauser Model HSc

Origin: West Germany

Manufacturer: Mauser Werke GmbH,
Oberndorf

Cartridge: 9mm Kurz (380 ACP)

Magazine capacity: 7 rounds

Overall length: 6¹/₄ inches

Height: $4\frac{5}{8}$ inches

Barrel length: $3\frac{3}{16}$ inches

Weight: 23 ounces

The original Model HSc was produced from 1941 to 1945, and nearly all of the pistols of that time were made for the Nazi military and police. Many of these were brought into the U.S. during and after World War II by returning servicemen. Several years after the war, the Mauser Werke resumed production of the HSc for commercial sale. The postwar pistols were slightly redesigned, the main difference being a separate backstrap on the grip frame to simplify manufacturing. The pistol covered here is the newer postwar model.

Field Strip:



1. The takedown latch is located inside the front section of the trigger guard, and is pushed downward to release.



2. With hammer cocked, magazine removed, and safety-lever in the on-safe position, use a thumbnail to operate the takedown latch, and move the slide assembly forward about $\frac{1}{4}$ -inch.



3. Lift the slide assembly from the top of the frame.



4. Push the barrel forward to clear the extractor, lift it at the rear, and remove it from the bottom of the slide. **CAUTION:** *Recoil spring is under tension. Gun is now field-stripped.*

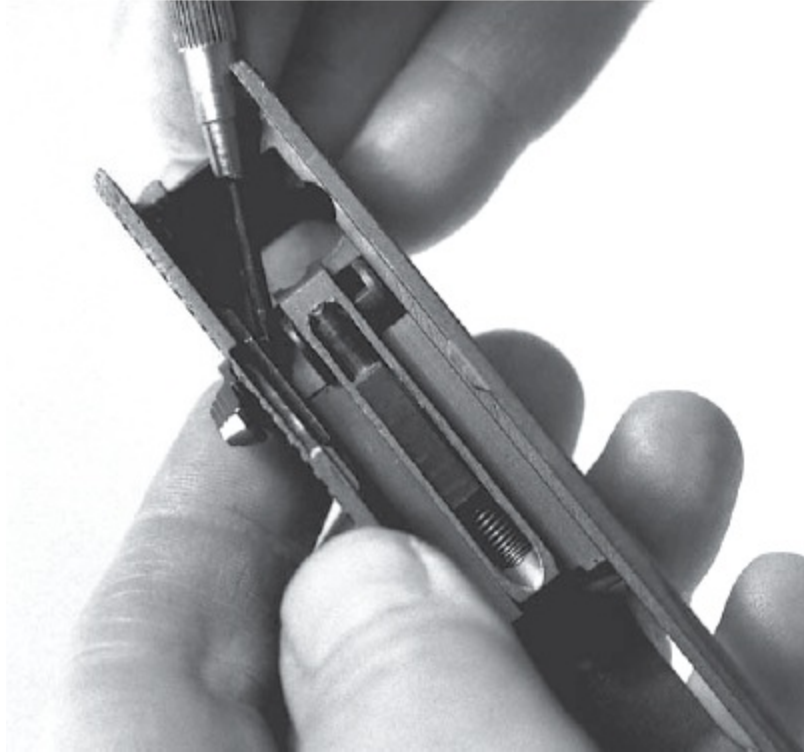


Mauser HSc field-stripped

Detail Strip:



- 5.** Use a small screwdriver to push against the rear shoulder of the firing pin body, and move it forward to clear the safety. While holding it there, turn the safety down to the on-safe position, and lift the firing pin, propping its round head against the rear inside edge of the firing pin recess in the slide.



6. With the firing pin propped out of the way, use the screwdriver to nudge the safety toward the left, and remove it from the left side of the slide. Then, push the firing pin back down and forward, and allow its spring to push it toward the rear. Lift the front of the firing pin from its recess, and remove the firing pin and its spring up and forward from the bottom of the slide. The safety spring and its plunger are relieved of tension by removal of the safety, and the extractor can now be removed from the right side of the slide. The spring and plungers which power the extractor and safety can now be taken out forward from the extractor recess in the slide.



7. After the grips are removed, the trigger bar is lifted of the left side of the frame, disengaging its lower edge from the trigger bar spring.



8. The trigger and its spring are retained by a cross-pin, and drifting this out will release the trigger for removal from the top of the frame. **CAUTION:** *The trigger spring is under tension. Restrain it when removing the tool that drives out the pin.*



9. To remove the takedown-latch, place a screwdriver of the proper size in the slot on its top, depress the latch as far as it will go, and give it a half turn to free its retaining flange from its shelf in the frame. The latch and its spring can now be removed upward.



10. The pin with coned ends at the lower rear of the grip frame serves several purposes. It stabilizes the grips against rotation, and also retains the backstrap, the magazine catch, and its spring, which is also the hammer spring. Before removing this pin, be sure the hammer is completely lowered by pushing forward on the sear arm (visible in the upper lobe of the frame cut) and easing the hammer all the way down. This will relieve tension on the hammer spring.



- 11.** After the backstrap, magazine catch, hammer spring and strut are removed (they are still in place in this photo), the hammer pivot is pushed out from left to right, and the hammer removed from the top of the frame. The smaller cross-pin at the top of the frame retains the combination part which is the hold-open device, ejector, and magazine safety, as well as the sear and cartridge guide. The sear spring is mounted inside the sear, and bears on the underside of the cartridge guide. Restrain this spring when the pin is removed. The spring which powers the ejector/hold-open/magazine safety is very small, and is mounted in the top of

the left frame wall, near the rear. Take care that it doesn't escape and become lost. The trigger bar spring is staked in place on the frame, and removal is not advisable except for replacement.

Reassembly Tips:

When replacing the trigger bar/disconnector on the left side of the frame, be sure the hammer is lowered, and depress the trigger bar spring slightly to engage it with its groove in the lower edge of the bar.

When replacing the hammer strut and spring, and the magazine catch and backstrap, be sure the hammer is fully lowered, in fired position, to prevent tension on the spring that would make insertion of the pin difficult.

When replacing the sear, sear spring, and cartridge guide in the frame, the use of a slave pin will make installation easier, but it is not absolutely necessary.

When replacing the safety, use a small screwdriver to depress the plunger and spring inside the right wall of the slide while the safety is moved inward.

Mauser 1896



Data: Mauser 1896

Origin: Germany

Manufacturer: Waffenfabrik Mauser,
Oberndorf

Cartridge: 7.63mm Mauser
(30 Mauser),
9mm Luger

Magazine capacity: 10 rounds

Overall length: $11\frac{9}{16}$ inches

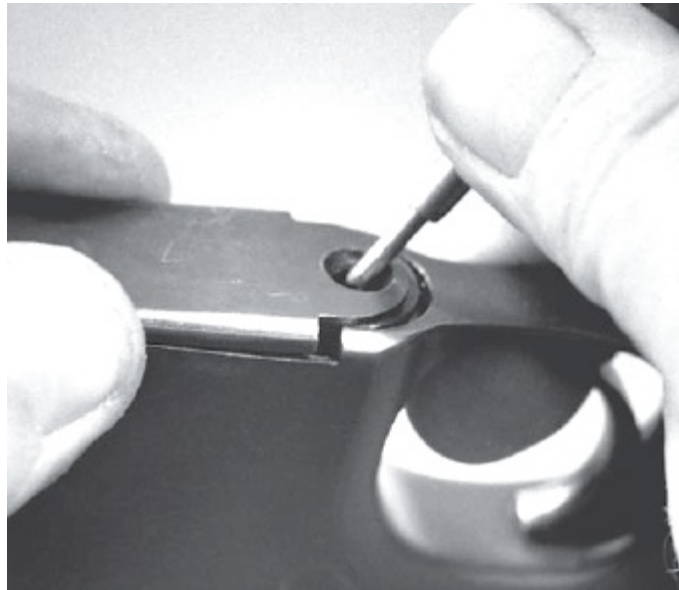
Height: $6\frac{1}{8}$ inches

Barrel length: $5\frac{1}{2}$ inches

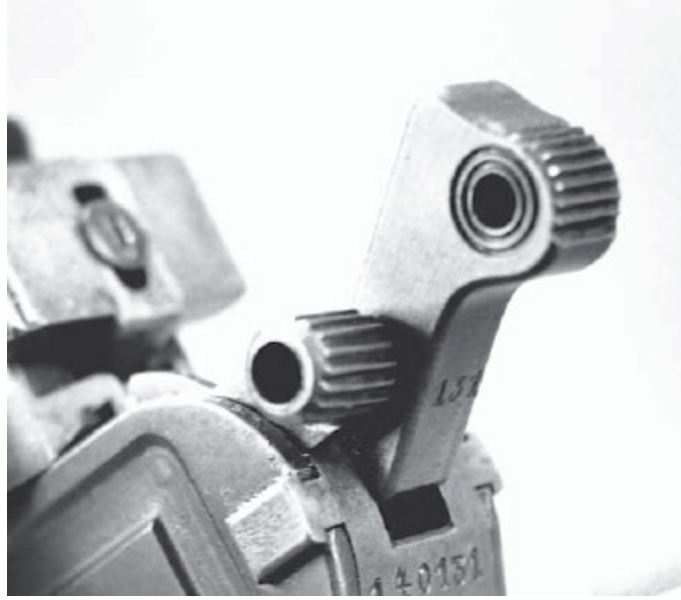
Weight: 39 ounces

The famous “Broomhandle” had the official factory designation C96, the C representing Construction, to separate it from the military guns, which all bore the prefix “Modell.” Although the C96 was never officially adopted by the German military, many of the guns saw service in several wars. Mechanically, the pistol is remarkable in having no pins and only one screw, the latter retaining the grips. The major portion of the production was in the 7.63mm chambering, but the gun was also offered in 9mm Luger, and a very few were made for a special round called the 9mm Mauser Export.

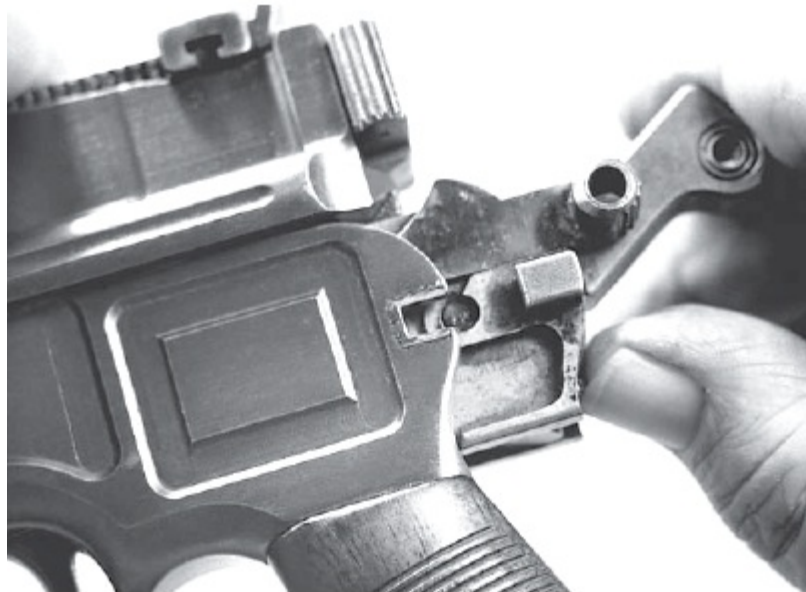
Field Strip:



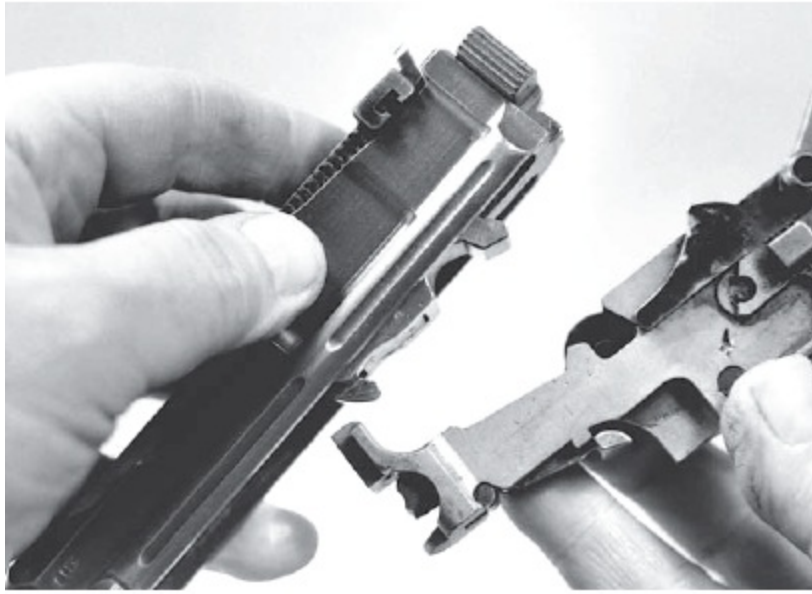
1. With a tool of bronze or some other non-marring material, depress the magazine floorplate latch and slide the floorplate forward until it can be lifted off. The magazine spring and follower will come out as well as the three parts are interlocked.



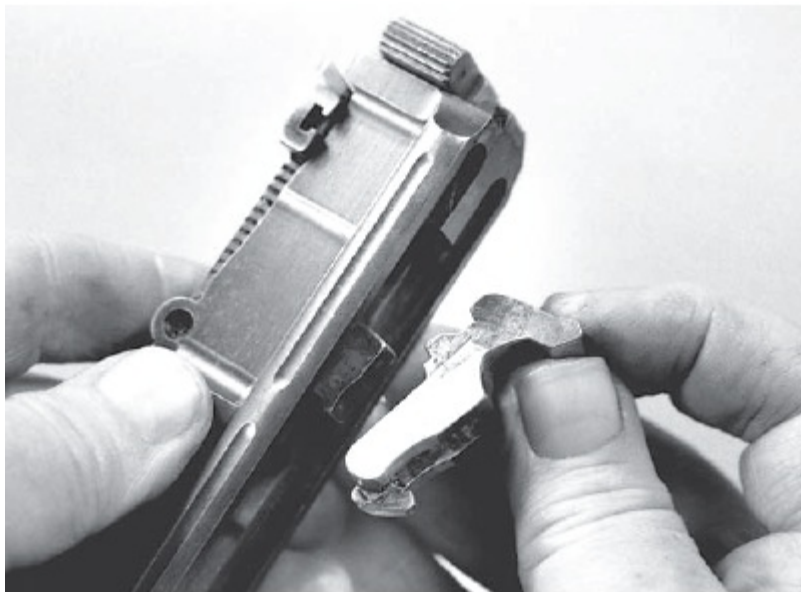
- 2.** The takedown-latch is located at the rear of the frame, just below the hammer channel. Cock the hammer.



- 3.** Use a thumbnail or some other non-marring tool to push the latch up, and while holding it there run the barrel assembly and sub-frame toward the rear and out of the grip frame.



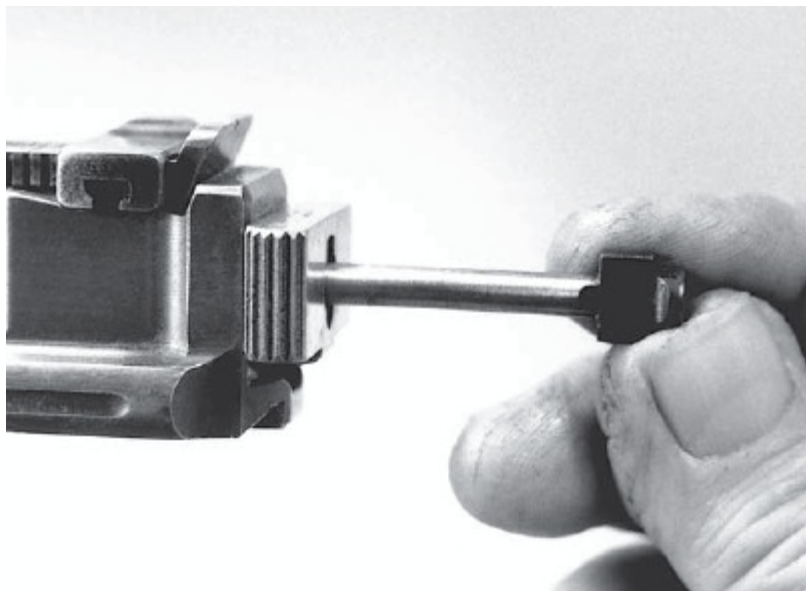
4. Detach the sub-frame from the barrel and bolt assembly.



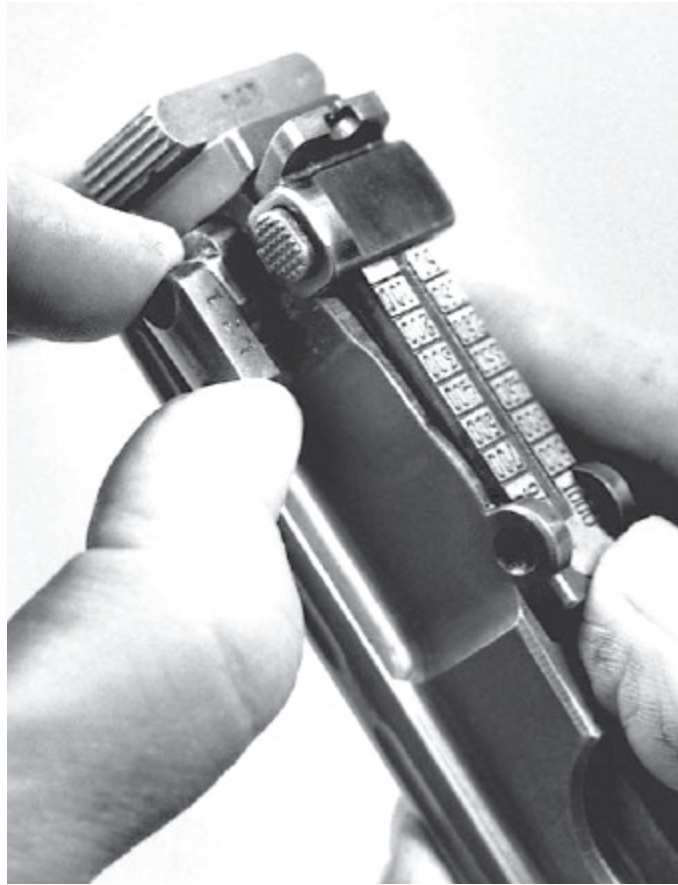
5. Remove the locking block from the underside of the barrel and bolt assembly.



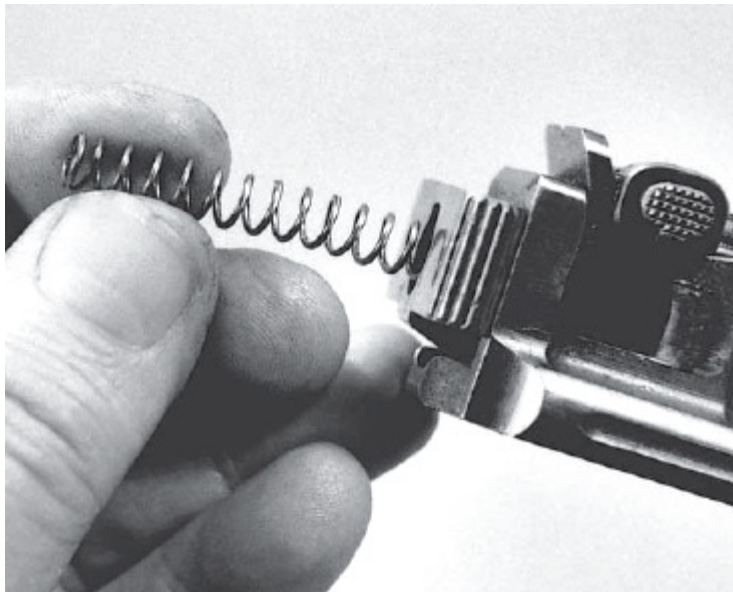
6. With a screwdriver of the proper size, push in the head of the firing pin and give it a quarter-turn to the right, then allow it to spring out.



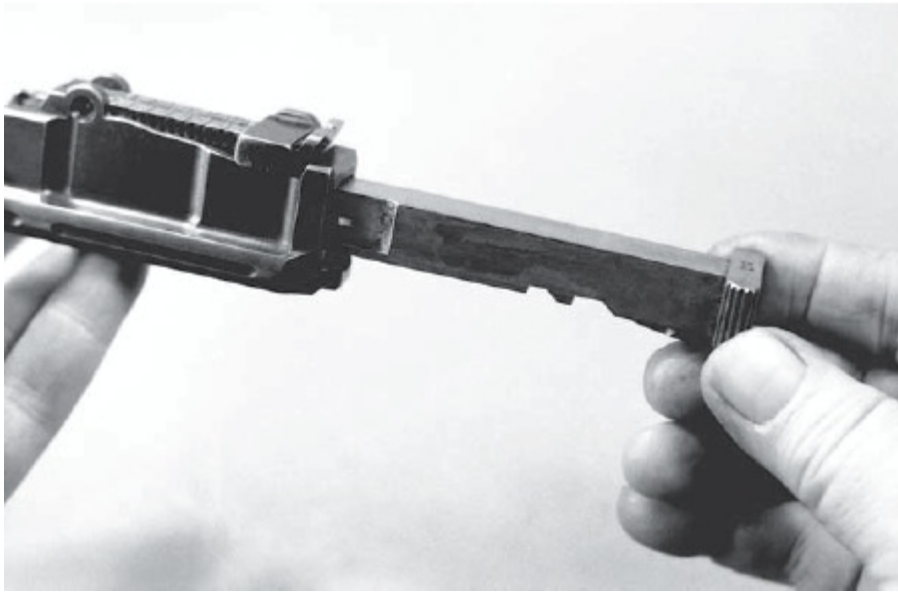
7. Remove the firing pin from the bolt. In most cases, the firing pin spring will also come out, attached to the front of the pin.



- 8.** Push the bolt retainer forward, then withdraw it from the right side.



9. Remove the recoil spring from its tunnel in the bolt.

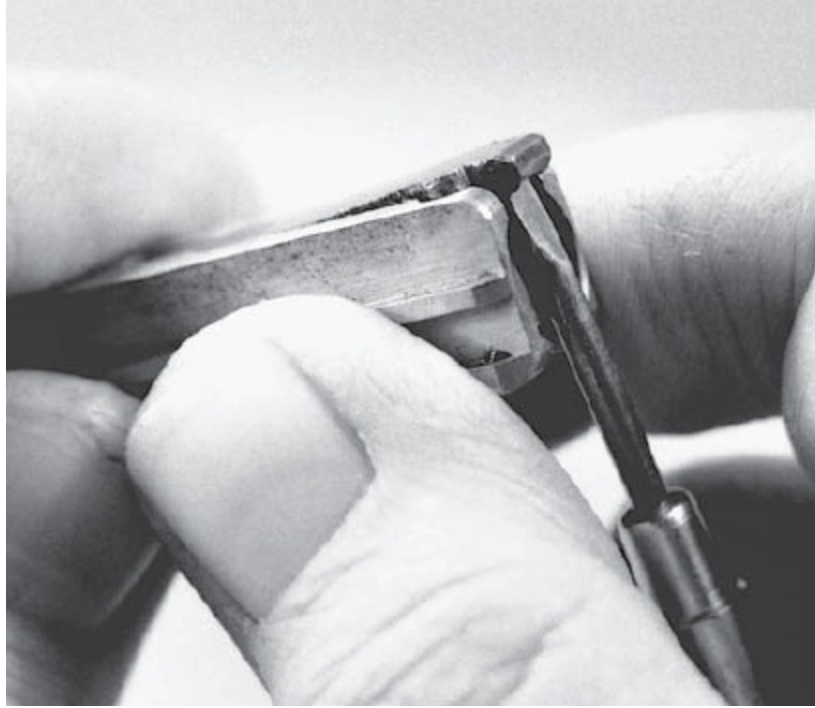


10. Remove the bolt from the barrel extension. **Gun is now field-stripped.**



Mauser 1896 field-stripped

Detail Strip:



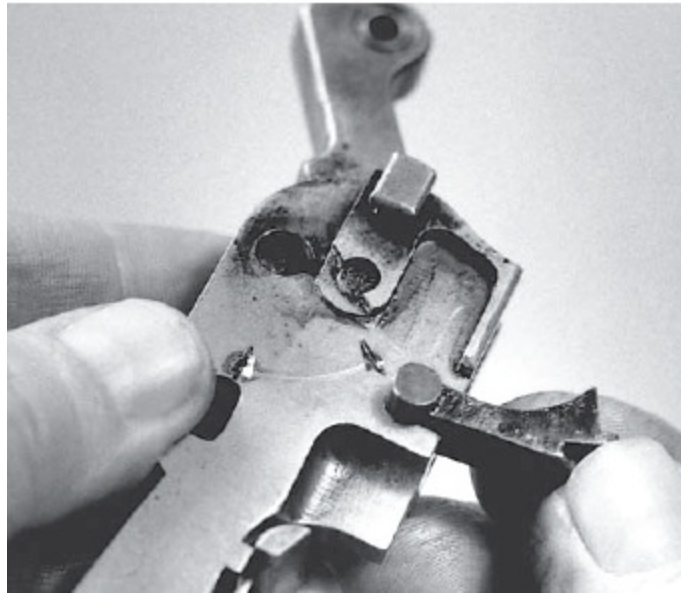
- 11.** Insert a screwdriver under the beak of the extractor and lift it just enough for its retaining wings to clear their recesses in the top of the bolt, and lever the extractor gently forward out of its recess.
CAUTION: *More extractors are broken in disassembly than in firing use. Proceed carefully.*



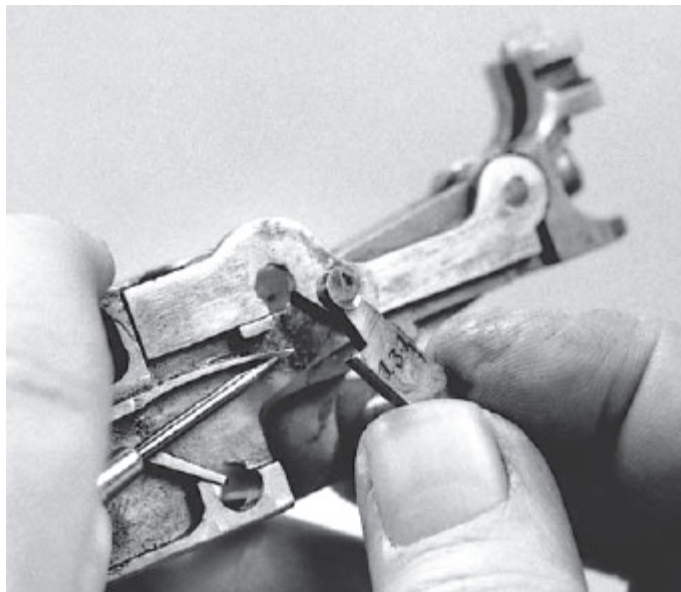
- 12.** Insert a screwdriver at the front of the sight base and lever the sight down and toward the rear for removal. When the sight is off, the adjustment bar and its button and spring are removed forward, and the sight spring can be taken out of the top of the barrel extension.



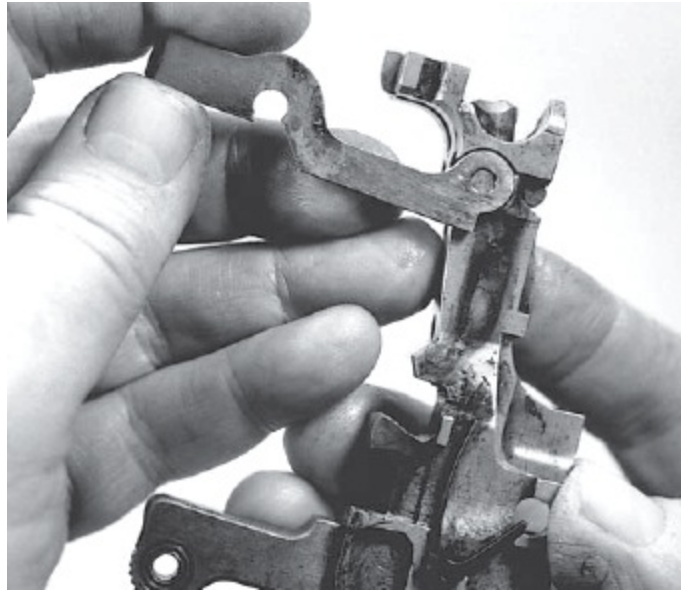
- 13.** Depress the hammer, and turn the safety-lever to a point halfway between its two positions. Lift the safety off toward the left.



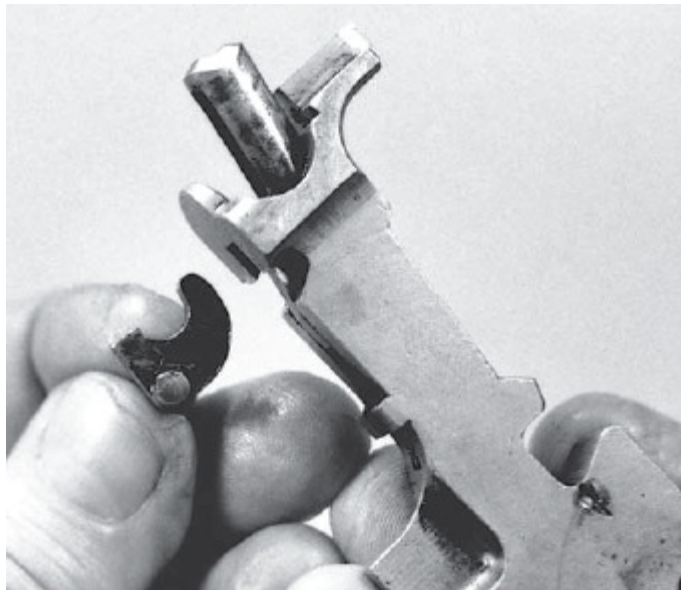
- 14.** Remove the takedown-latch toward the left side. Ease the hammer down to fired position.



- 15.** Depress the sear lever spring, and lift the sear lever off toward the right.



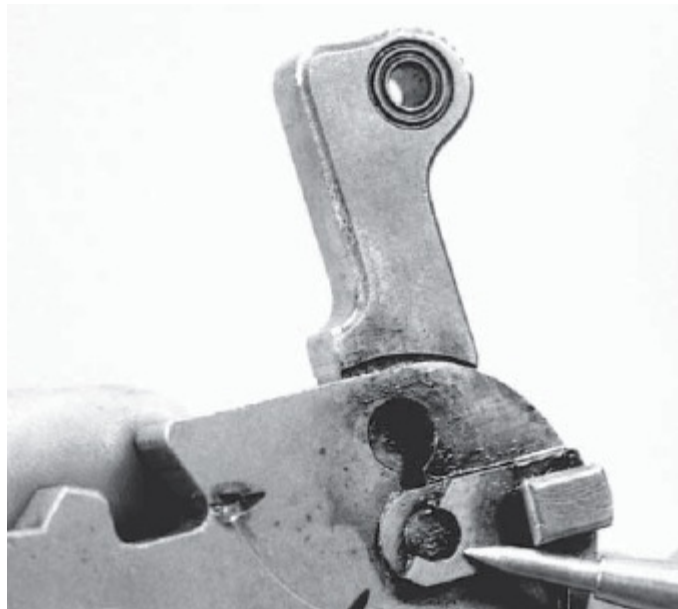
- 16.** Rotate the sear to the position shown, until its forward clip clears its recess in the sub-frame, and remove the sear toward the right.



- 17.** Depress the rocker plunger at the front of the sub-frame, and remove the rocker coupling from the underside. **CAUTION:** *The mainspring is under heavy tension, even with the hammer at rest, so proceed carefully.* It may be necessary to clamp the sub-frame in a padded vise for this operation. The photo shows the rocker coupling removed, and in the proper orientation for replacement.



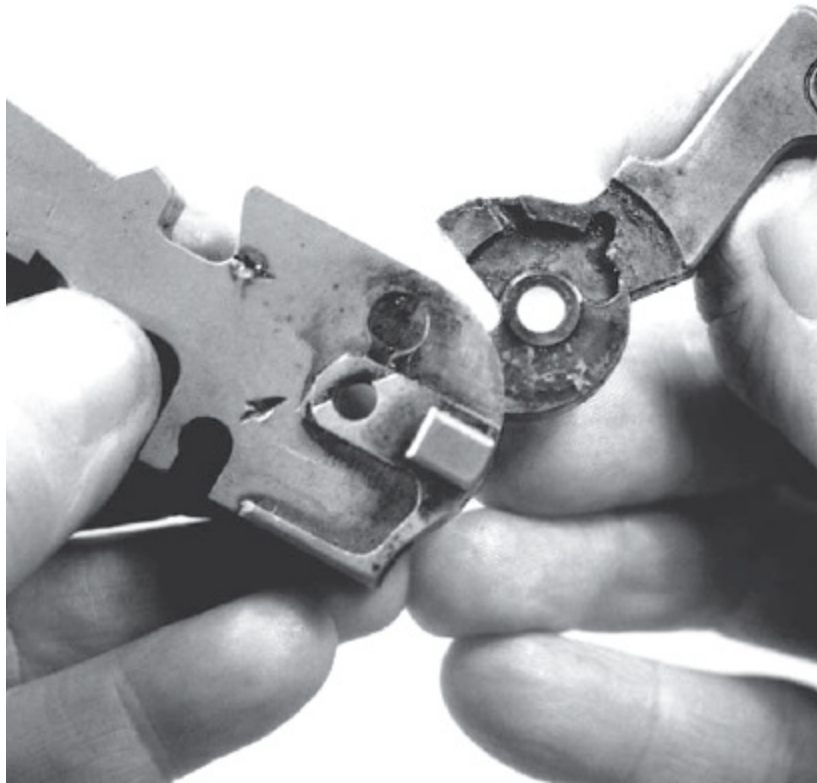
18. Remove the rocker plunger, mainspring, and mainspring plunger from the sub-frame toward the front.



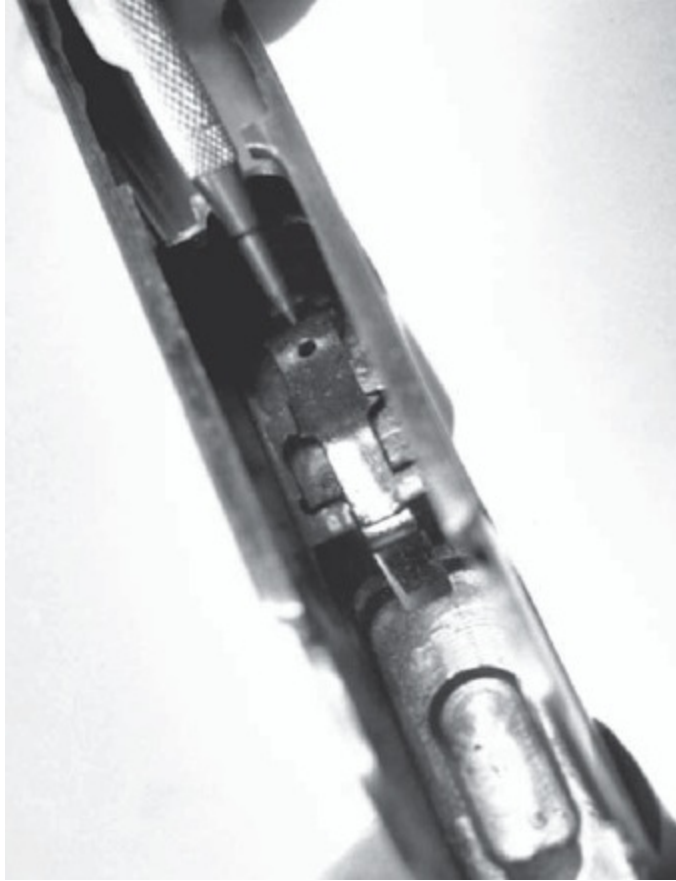
19. Push the hammer pivot toward the right side for removal.



- 20.** The right end of the hammer pivot is formed into the springs for the takedown latch and the sear-lever. Remove this part carefully to avoid breakage.



21. Remove the hammer from the top of the sub-frame.



- 22.** The flat spring in the floor of the grip frame retains the magazine floorplate latch and the trigger. Its front end is hooked down into a groove in the floorplate latch. Insert a small tool in the hole in the forward part of the spring, lift it slightly at the front, and slide it to the rear out of its slots in the frame. The floorplate latch and the trigger can now be removed upward.

Reassembly Tips:

When replacing the rocker coupling, note that its “hook” must be pointed forward (see #17). Unfortunately, it is possible to install the rocker coupling backwards, with disastrous results. When this is done, the pistol can be completely put back together, but the nose of the coupling will lock on the front of the trigger/floorplate latch spring, and no amount of force will disassemble it again. Special tools will be required. So, remember: The “hook” of the rocker plunger goes at the

top, and toward the front of the sub-frame.

When replacing the bolt retainer, use a screwdriver through the rear hole of the bolt to slightly compress the recoil spring while inserting the retainer.

Mauser 1910/34



Data: Mauser Model 1910

Origin: Germany

Manufacturer: Waffenfabrik Mauser,
A.G., Oberndorf

Cartridge: 6.35mm Browning
(25 ACP)

Magazine capacity: 9 rounds

Overall length: $5\frac{3}{8}$ inches

Height: $4\frac{3}{16}$ inches

Barrel length: $3\frac{1}{16}$ inches

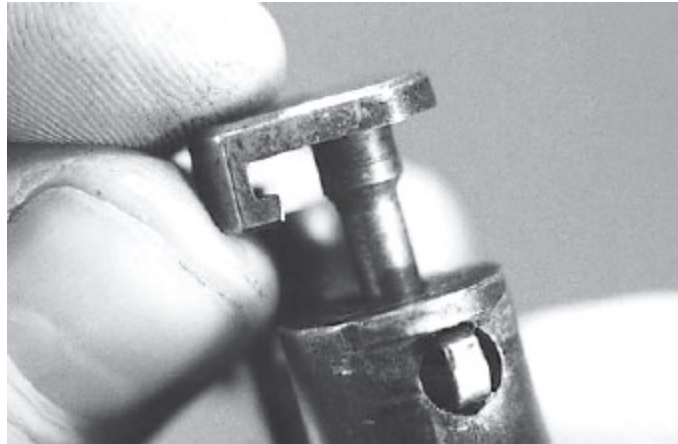
Weight: $15\frac{1}{2}$ ounces

The 25-caliber version of the Mauser Pocket Pistol is the only true Model 1910. The 32 chambering did not come along until four years later, and the slightly larger 32 pistol is properly called the Model 1914. Both pistols were slightly redesigned in 1934, so that year/model designation can be in either caliber. The Model 1910 is a typical example of fine European gunmaking of the old school, the fit, the finish, and quality being superb. Like many of the earlier autopistol designs, it has many flat springs, and these break with some frequency. Although the gun now has much collector interest, many of them are still in everyday use.

Field Strip:



1. With an empty magazine in place, draw back the slide until it locks open and depress the small takedown catch, located on the underside of the frame, just behind the barrel retaining rod.



2. Turn the barrel retaining rod head to the side (while holding down the catch), and draw the rod forward out of the frame.



3. Lift the barrel straight up out of the frame and slide.



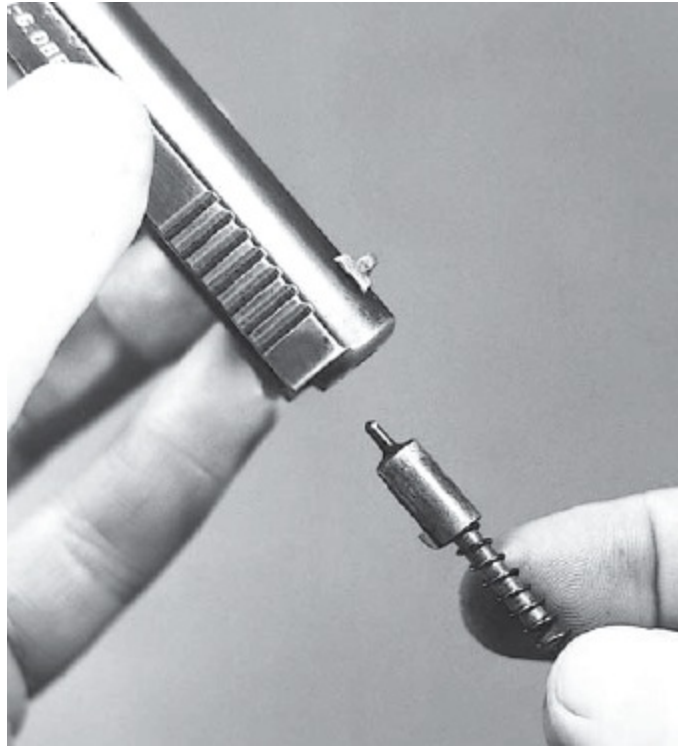
4. Holding the slide against the tension of the recoil spring, withdraw the magazine slightly and push it back in to free the slide. Ease the slide forward slowly.



5. Stop the slide at its normal battery position, the back edge even with the frame, and pull the trigger to drop the striker. The slide must be positioned exactly, or the disconnecter will prevent striker fall.



6. Withdraw the magazine, and run the slide forward off the frame. The recoil spring and its hollow guide can now be removed from the front of the frame.



7. Remove the striker (firing pin) and its spring from the rear of the sear. **Gun is now field-stripped.**



Mauser 1910/34 field-stripped

Detail Strip:



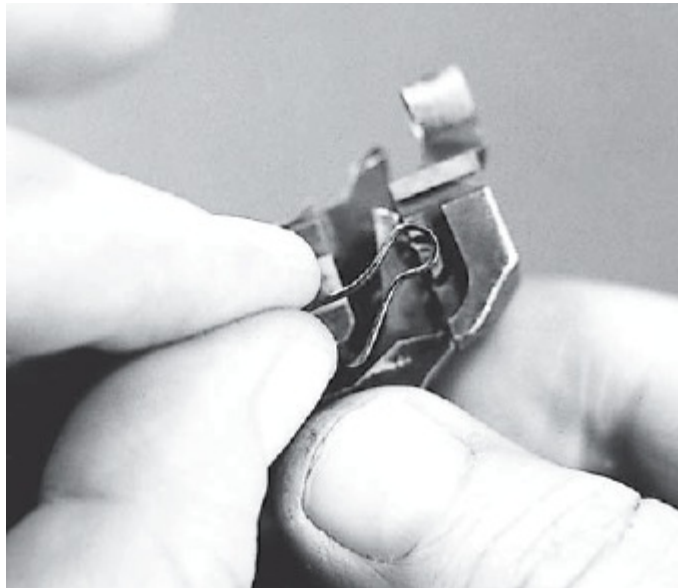
8. Slide the sideplate upward to this point, then swing the rear portion up to free it from the frame. **Note:** The earliest version of the 1910 pistol has a latch just above the trigger guard to remove the side plate.



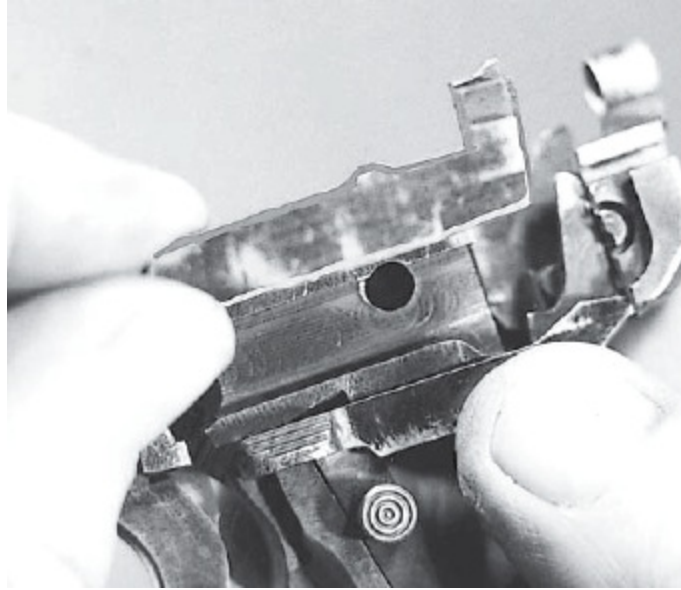
- 9.** The disconnecter, located just above the trigger, can now be lifted from its recess in the frame.



- 10.** Removal of both grip screws will allow the one-piece grip to be slid off toward the rear. **CAUTION:** *As this is done keep pressure on the internal parts, as some will be freed by the removal of the grip.*



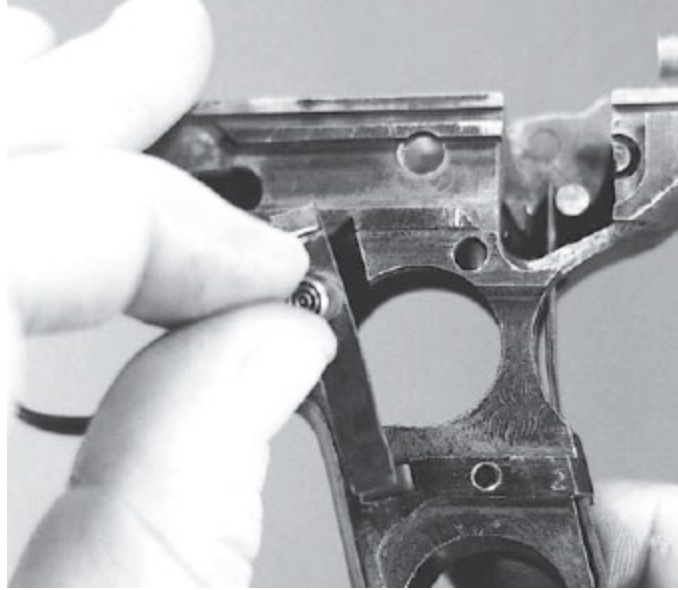
- 11.** Keeping pressure on the safety bar, remove the combination sear and safety bar spring from its recess in the frame.



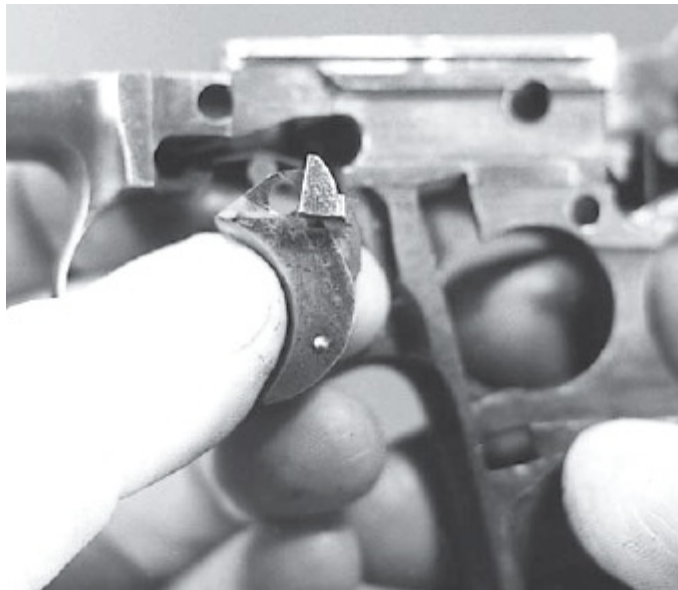
12. The sear may now be lifted away from the frame.



13. The safety bar, when released, will be forced away from the frame by the tension of its release button spring, and can be removed.



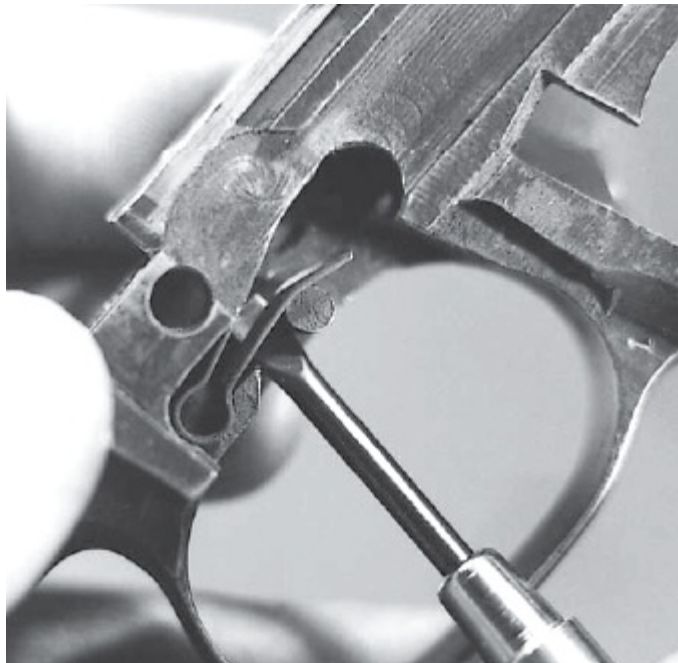
- 14.** The safety bar release is keyed into the frame at its lower end, and can now be carefully pivoted outward and removed.



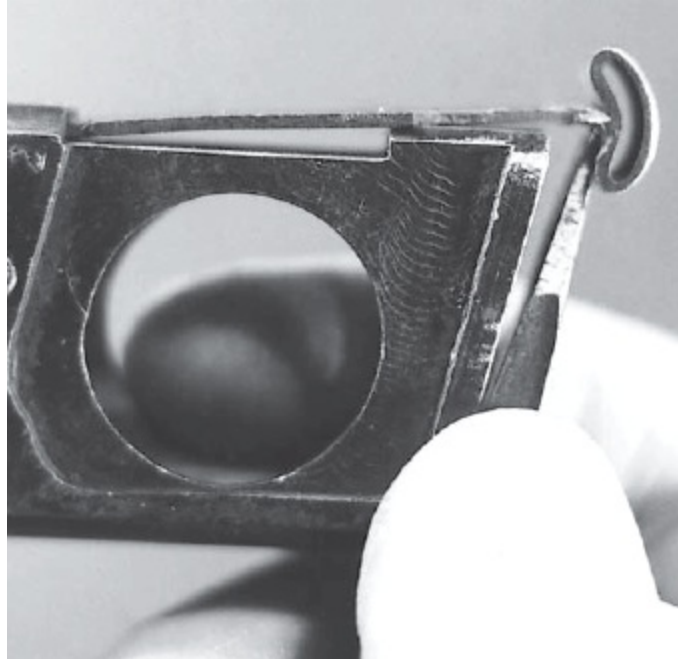
- 15.** The trigger may be simply moved straight out to the left, slipping it off its fixed post in the frame.



- 16.** If necessary for repair or refinishing, the sear lever (arrow) inside the trigger and its spring can be removed by forcing out the small cross-pin with a drift of proper size.



- 17.** The trigger spring can be removed by sliding a sharp tool, such as a small screwdriver, beneath it and working it carefully out of its recess.



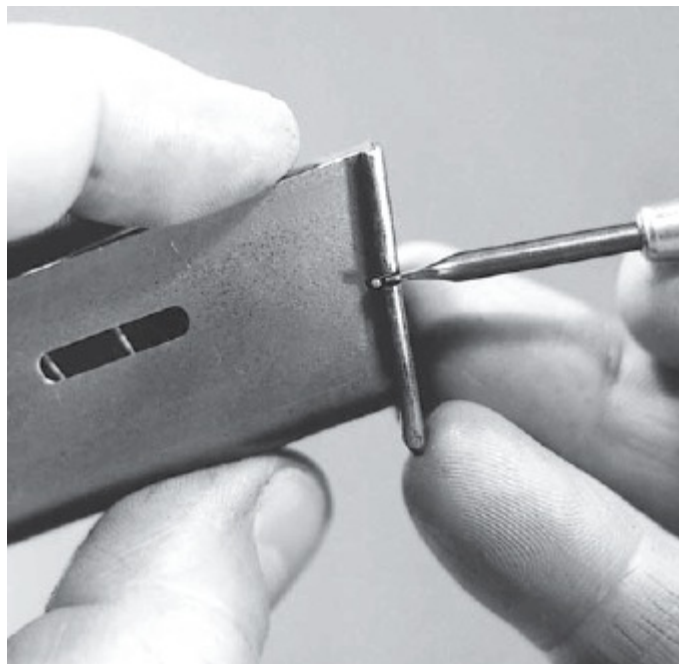
- 18.** Use a larger screwdriver to lift the magazine catch just enough to clear its stop shoulders on the back of the frame, and slide it out toward the bottom of the grip frame. **CAUTION:** *Lift it only enough to clear or it may break.*



- 19.** The upper end of the magazine catch also serves as the spring for the combination hold-open device, ejector, and magazine safety. This part can now be rotated to the position shown, and removed from its fixed pivot in the frame.



- 20.** If your Mauser is an early one, with a “neck” at the rear of the extractor, lift the extractor from inside the slide, just enough to clear, and lever it gently toward the front until it is free of the slide. If you have a later gun, with a “straight” extractor, don’t do as the illustration shows. Instead, look inside the striker tunnel on the right side, and you will see the rear lug of the extractor. Use a drift to force it gently outward and toward the front of the slide.



- 21.** To remove the magazine floorplate, use a small screwdriver to force the locking tip of the magazine spring from its slot in the

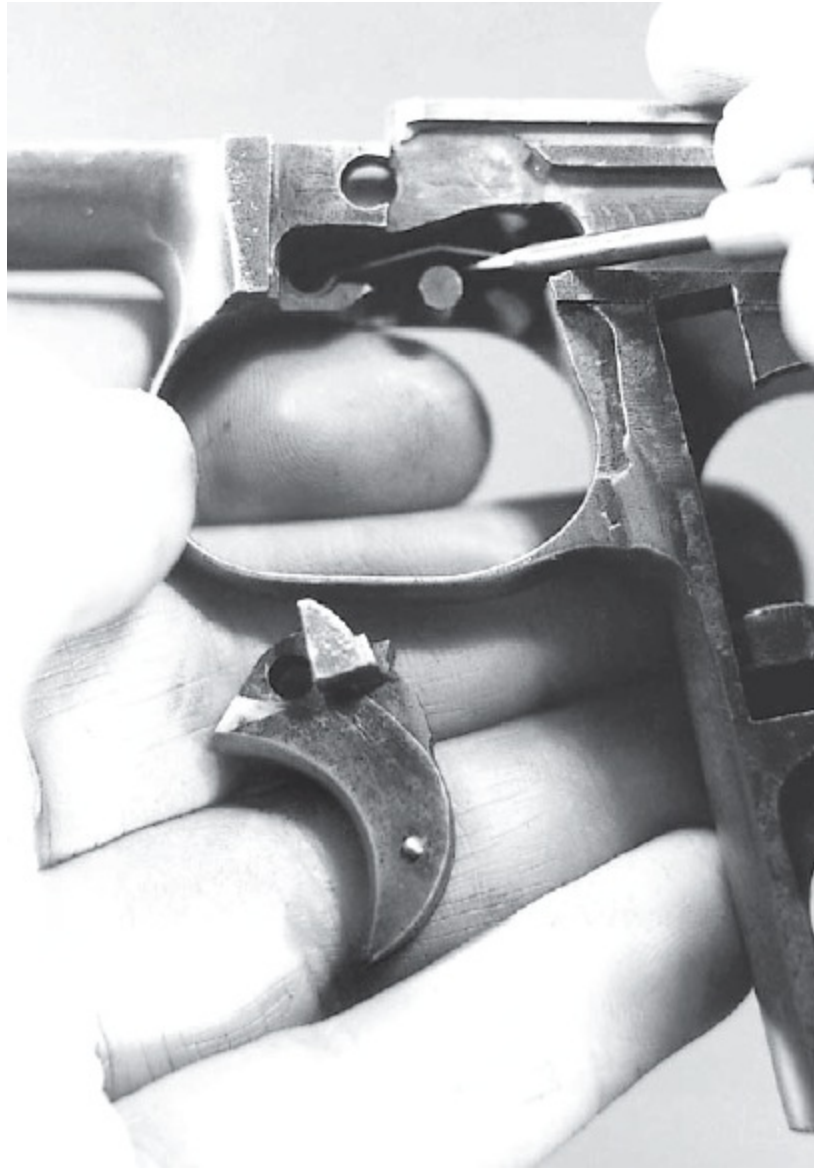
floorplate, and slide the floorplate off toward the front.

CAUTION: *This will release the magazine spring. Use a shop cloth to ease it out.*

Reassembly Tips:



1. When replacing the magazine catch, be sure that the combination hold-open, ejector, and magazine safety piece is put in first, and see that the upper end of the catch lies in front of the round lug on the part, as shown.



2. When replacing the trigger, use a small tool to slightly lift the lower arm of the trigger spring before sliding the trigger back into place.

Nambu Type 14



Data: Nambu Type 14

Origin: Japan

Manufacturer: Various government
arsenals

Cartridge: 8mm Nambu

Magazine capacity: 8 rounds

Overall length: 9 inches

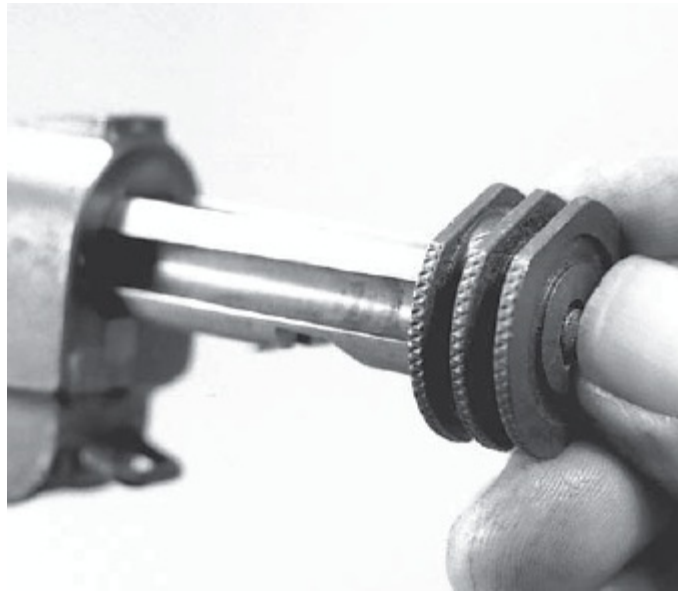
Height: 5⁷/₈ inches

Barrel length: 41¹/₁₆ inches

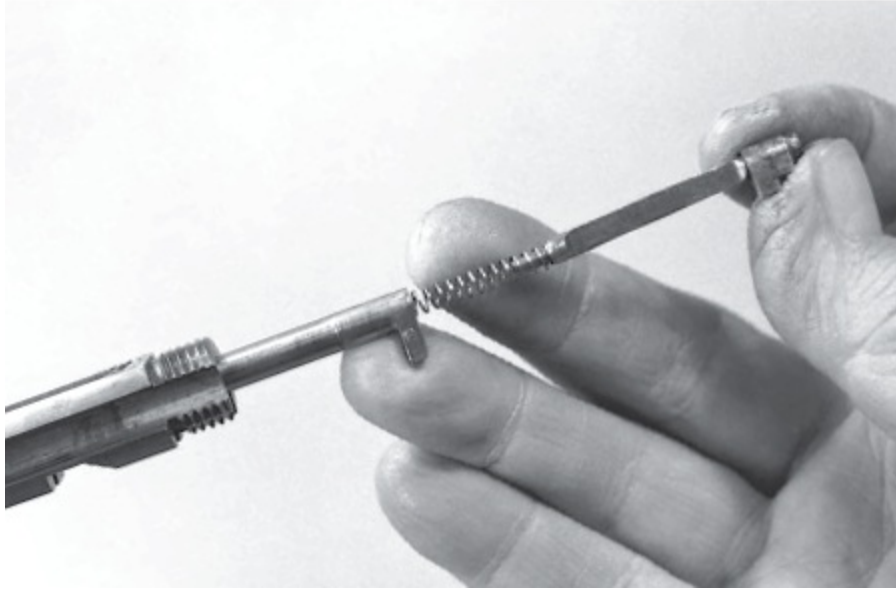
Weight: 32 ounces

The Type 14 pistol, adopted by the Japanese military in 1925, was a redesign of an earlier gun invented by Colonel Kijiro Nambu around 1904. There are two distinct variations of the Type 14. Not all of the internal parts will interchange, but the takedown of the two versions is essentially the same. The latter type has an extended front loop of the trigger guard, and a longer firing pin, among other differences.

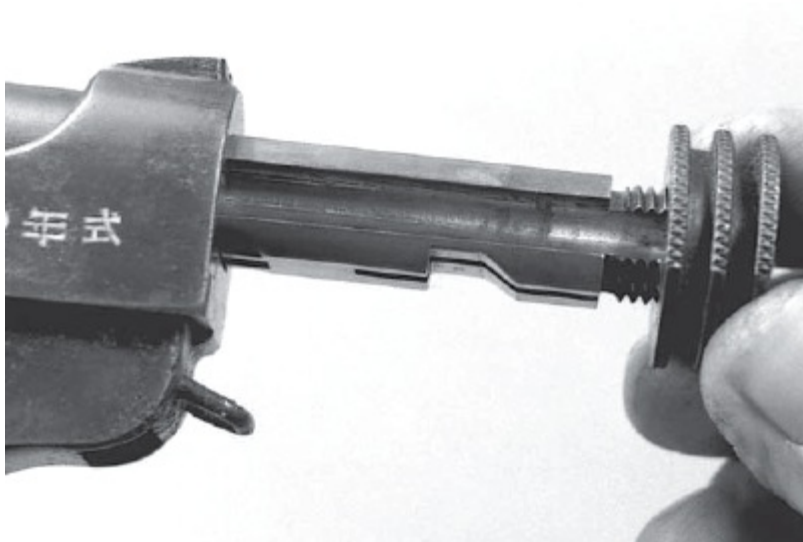
Field Strip:



1. With an empty magazine in place, pull back the bolt until it locks open. Depress the striker spring guide button at the rear, and while holding it in, unscrew the bolt retracting knob and remove it.



- 2.** Remove the striker spring guide, spring, and the striker (firing pin) from the rear of the bolt.



- 3.** Replace the knob at the rear of the bolt to assist in lowering the bolt. Remove the magazine, and gently let the bolt run forward.



4. Remove the grip screws and the grip panels. Note that the panels extend beneath the top edge of the frame and must be lifted at the lower end, then pulled down for removal.



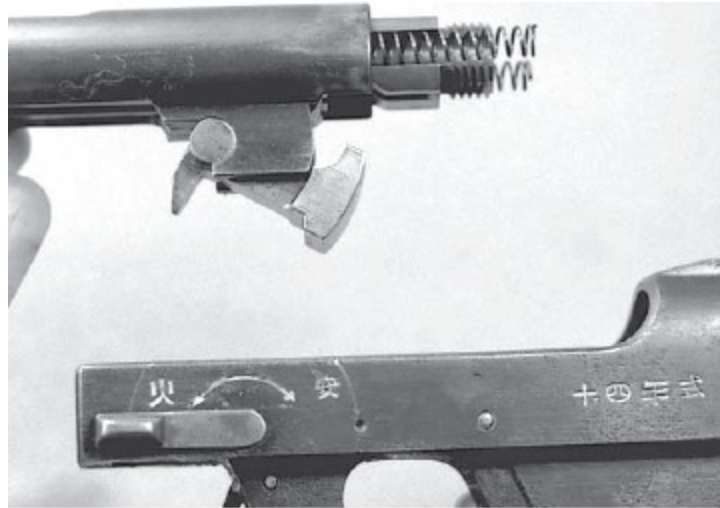
5. Move the barrel assembly to the rear until it stops, push in the magazine release button as far as it will go, and slide the trigger guard down along the line of the grip frame for removal. If necessary for repair, the trigger pivot pin and the disconnecter pin in the trigger can be drifted out to free these parts and their attendant springs.



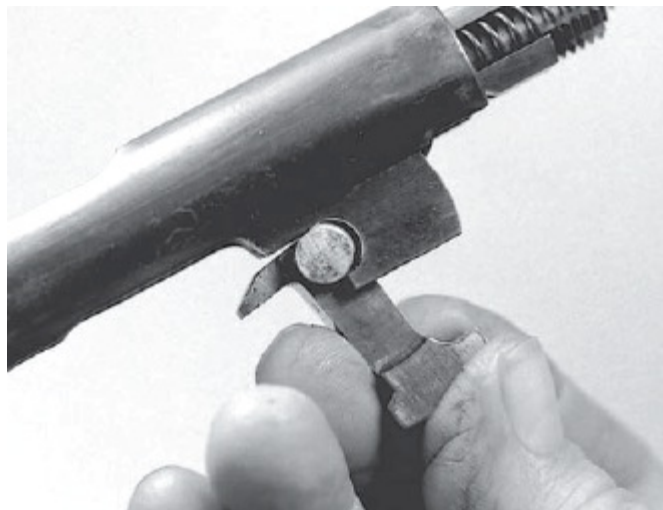
6. Remove the bolt knob, and allow the bolt and barrel assembly to move forward in the receiver.



7. When the bolt/barrel assembly has reached this position, it can be removed from the frame.



8. Lift the bolt/barrel assembly straight up off the frame. The locking block will come off with the assembly.



9. Rotate the locking block to the position shown, and it can be removed forward from its pivot recess in the underlug of the barrel extension. Remove the locking block spring from its recess in the frame, at the rear of the magazine well.



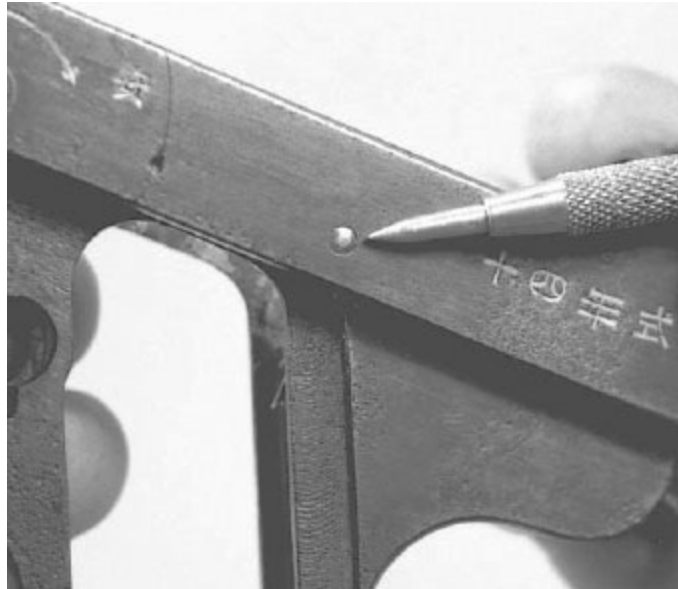
10. Remove the bolt from the barrel extension, and the twin recoil springs from their channels in the bolt. **Gun is now field-stripped.**



- 11.** Removal of the trigger group will release the magazine catch and its spring to be taken off toward the left.



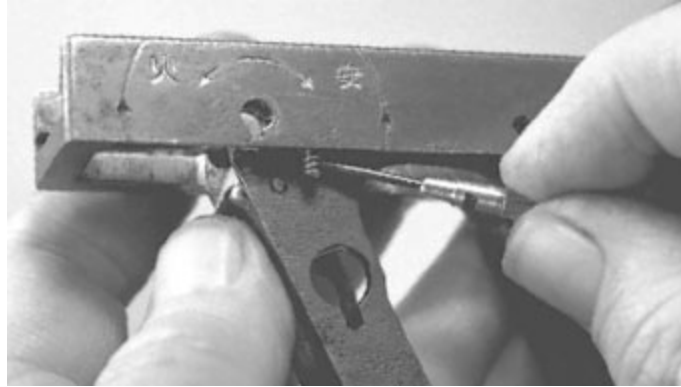
- 12.** Rotate the safety-lever to the position shown, and remove it toward the left. **CAUTION:** *Find the exact position and use no force or the safety-lever may break off.*



- 13.** The sear pivot pin is located near the center of the left side of the frame wall, and is driven inward to release the sear for removal.



- 14.** After the pin is removed, the sear can be moved down and out of its recess in the frame.



- 15.** After the sear is removed, use a small screwdriver to extract the sear spring from its well in the frame.

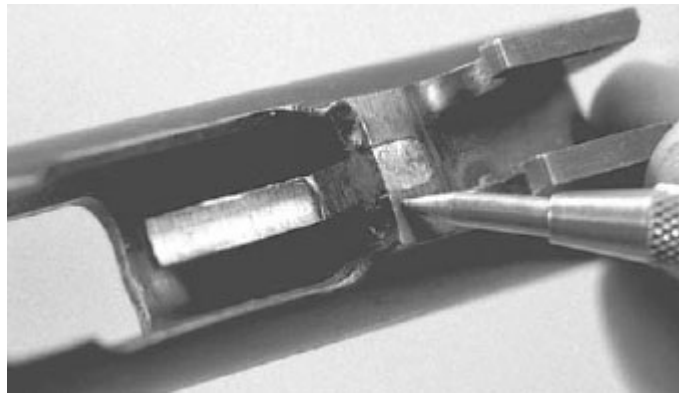


- 16.** A cross-pin at the upper front of the grip frame retains the magazine safety, spring, and plunger.



- 17.** The extractor is dovetail-mounted in the top of the bolt. To remove it, insert a screwdriver under its beak, lift it to clear the retaining lug on its underside, and lever it forward out of its

recess in the bolt. **CAUTION:** *Take care not to lift the front of the extractor too high, or it will snap off.*



- 18.** The ejector is T-slot mounted in the barrel extension, on the underside just forward of the locking block lugs. It is driven forward for removal. Note that it is usually staked in place, and will be difficult to drive out. Removal is not advisable except for replacement.

Reassembly Tips:

When replacing the bolt knob, allow the striker spring guide to seat fully in the knob, with its locking point in its recess in the rear face of the knob. Turn the knob until it stops, then back it off a half turn; orient the knob so the locking point on the guide button is aimed down and toward the left. Push in on the button, and hold it in while turning the knob the rest of the way. When the knob is all the way on, release the button and back off the knob a small amount until the button snaps out to lock it in place.

When replacing the safety-lever, take care not to put heavy pressure on the lever arm, or it may break.

Nambu Type 94



Data: Nambu Type 94

Origin: Japan

Manufacturer: Various government
arsenals

Cartridge: 8mm Nambu

Magazine capacity: 6 rounds

Overall length: $7\frac{5}{16}$ inches

Height: $4\frac{5}{8}$ inches

Barrel length: $3\frac{7}{8}$ inches

Weight: 25 ounces

The Type 94 pistol was introduced in 1934 as a gun for commercial export, but in a short time the manufacture was taken over by government arsenals, and it was made in steadily declining quality through World War II. Much has been said and written about one particular feature of the pistol—the long sear bar which is level with the surface on the left side. On the Type 94 pistols that I have examined, it is not easy to push in the forward position of the sear and fire the gun. It takes a concentrated effort, and is not likely to occur accidentally. It has also been said that the pistol is of poor design, and this is equally untrue. Some of the late wartime guns, though, are of dubious quality.

Field Strip:



1. Leave the magazine in the pistol, and draw back the slide until it locks open. Depress the firing pin and push the takedown bar out toward the left side. Don't push it all the way out.



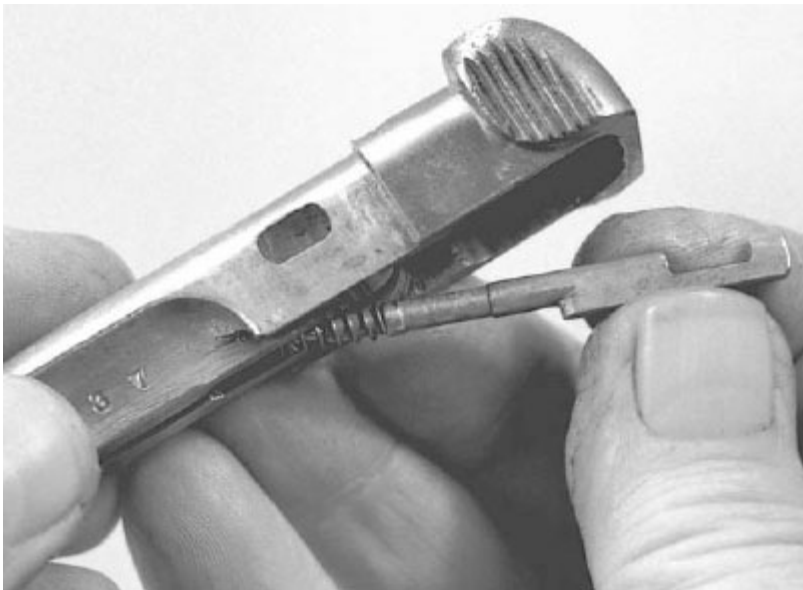
2. While holding the slide as shown, against the tension of the recoil spring, remove the locking bar from the left side.



3. Ease the slide forward off the frame. The recoil spring will likely come off with the slide. Remove the magazine.



4. Remove the breechblock (bolt) from the rear of the frame.



5. Remove the firing pin and spring from the breechblock.



6. Lift the barrel straight up from the top of the frame.

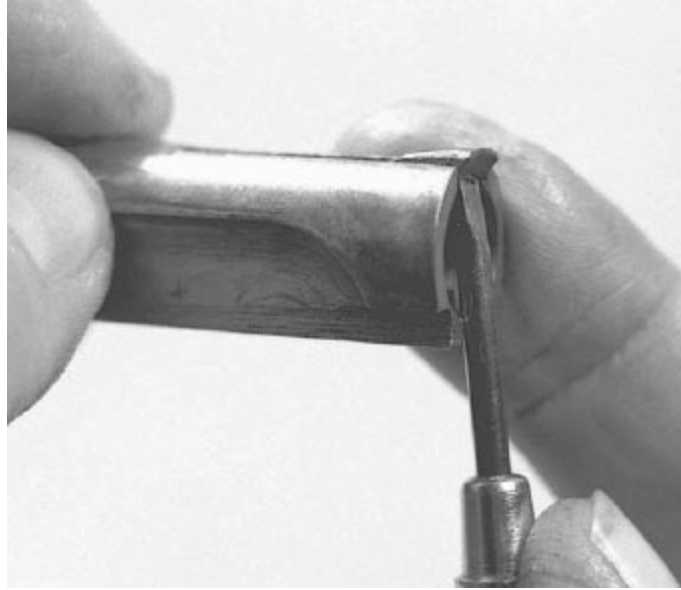


7. Lift the locking block straight up from its recess in the top of the frame. **Gun is now field-stripped.**



Nambu Type 94 field-stripped

Detail Strip:



8. Gently force the extractor upward to clear its retaining lug in the breechblock, and lever it forward out of its dovetail recess.

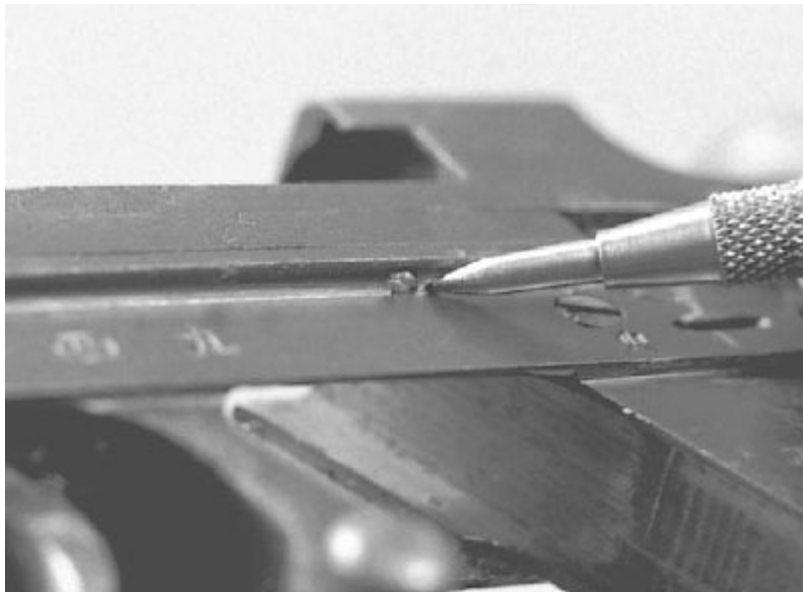
CAUTION: *Extractor is tempered to be its own spring, and if flexed too far, it will break.*



9. With the grips removed, depress the hammer and turn the safety-lever down to the position shown. It can then be removed toward the left side.



- 10.** The screw just forward of the safety-lever retains the hammer. With the hammer lowered to reduce spring tension, back out the screw and ease the hammer and spring upward and toward the rear for removal.



- 11.** The sear is retained by a vertical pin (arrow) in the frame, just forward of the hammer screw. Drift out this pin toward the top of the frame, and remove the sear and its spring toward the left side.



- 12.** The trigger is retained by a cross-screw, and is removed from the top of the frame, along with its spring. The magazine catch button is threaded onto the cross-shaft of the magazine catch, and requires a split-end screwdriver for removal. The button and catch spring are removed toward the left, the magazine catch toward the right side. The magazine safety is also retained by the cross-shaft of the magazine catch, and this part and its spring will be released by removal of the catch.



- 13.** The ejector is dovetail-mounted in the top of the frame at the rear of the magazine well, and can be driven forward for removal.

Reassembly Tips:

Note that there is a thin steel sleeve at the rear of the recoil spring. Be sure that this is kept at the rear during reassembly.

When replacing the locking block in the top of the frame, note that it goes between the underlugs of the barrel, and that the slanted faces of its upper wings should be toward the rear.

The fixed barrel arms on the frame must align with the forward lug of the barrel.

Note that there is a small tab on the locking bar, or takedown bar, which fits into a small recess on the left side of the slide. Be sure that the bar is inserted so that these will match.

Remember to depress the hammer when inserting the safety-lever, and avoid putting heavy pressure on the outer end of the lever during

insertion.

Ortgies



Data: Ortgies

Origin: Germany

Manufacturer: Deutsche Werke, Erfurt

Cartridge: 32 ACP

Magazine capacity: 8 rounds

Overall length: $6\frac{3}{8}$ inches

Height: $4\frac{5}{16}$ inches

Barrel length: $3\frac{7}{16}$ inches

Weight: 22.4 ounces

This pistol was first made in small quantity by the inventor, Heinrich Ortgies, but most of the production was by the Deutsche Werke in Erfurt. In addition to the 32-caliber version, which was the most popular, there was also an identical gun in 9mm Kurz (380 ACP), and some of those had an additional manual safety. A smaller version was chambered for the 25 ACP cartridge. The mechanical details of all of these pistols will be essentially the same, with the exception of the added safety on some 380 pistols.

Field Strip:



1. With the magazine removed and the striker in the fired position, move the slide $\frac{7}{16}$ -inch to the rear, push the button at the left rear of the frame, and move the rear of the slide upward.



2. Run the slide forward off the frame and barrel.



3. Move the striker back until the lug on its right side aligns with the exit track in the underside of the slide, and lift out the striker, spring, and follower. **Gun is now field-stripped.**

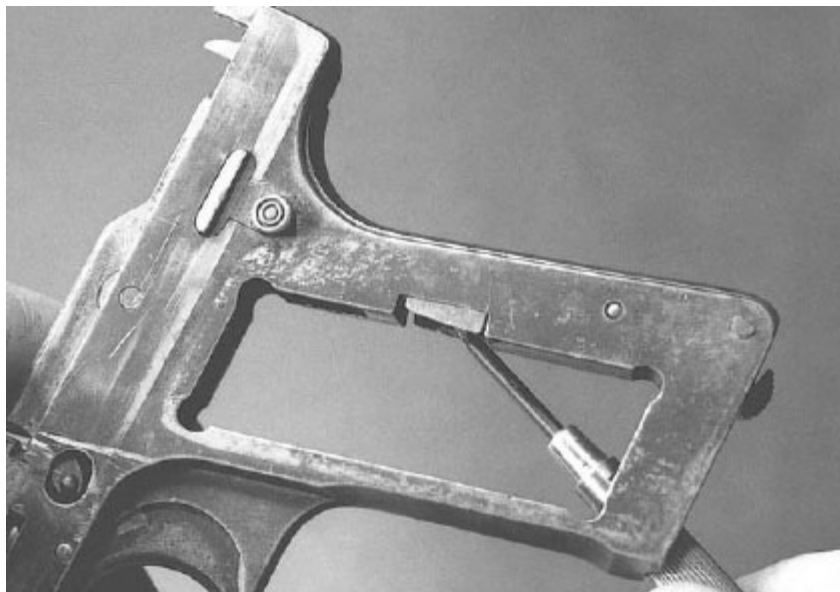


Ortgies field-stripped

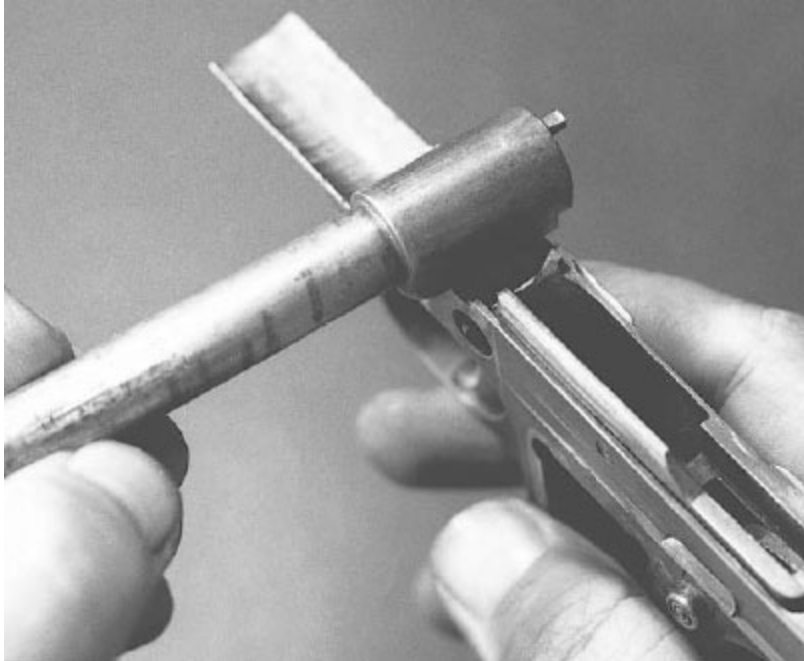
Detail Strip:



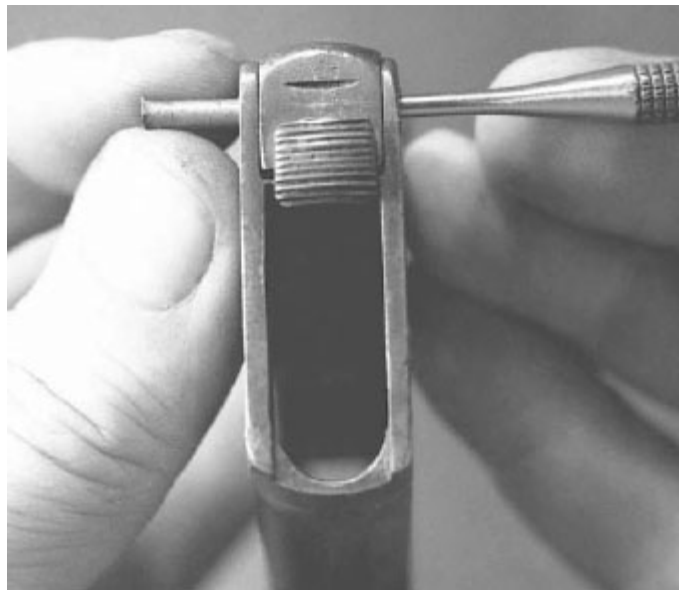
4. The extractor and its spring are retained in the slide by a vertical pin. The pin should be drifted out toward the bottom of the slide.



5. To remove the grips, insert a screwdriver into the magazine well, and press the grip retainer toward the rear, as shown. The grips are undercut at the front, so lift each panel at the rear while keeping the latch pressed in. Grips have been removed here to show the location of the retainer latch.



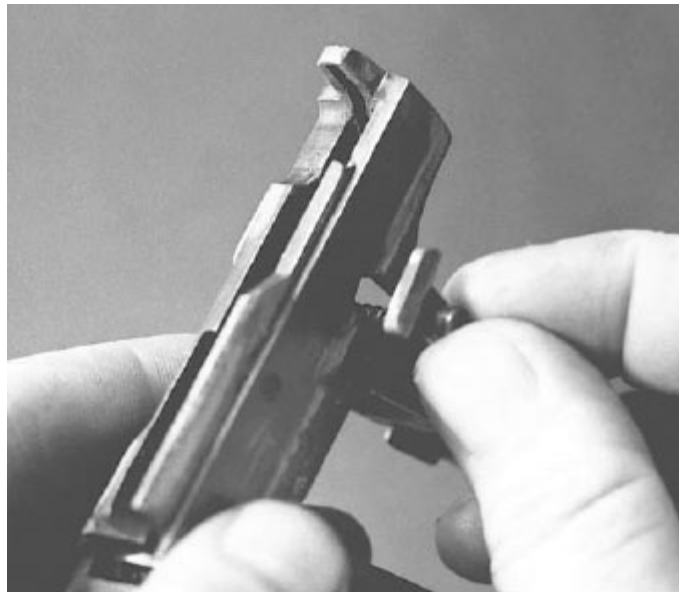
6. Turn the barrel straight out to the left, and lift it straight up off the frame. **Note:** Barrel may be tight, and may require a light rap with a nylon hammer to start it toward the left.



7. With a drift punch of the proper size, push out the large pin at the lower rear of the grip frame.



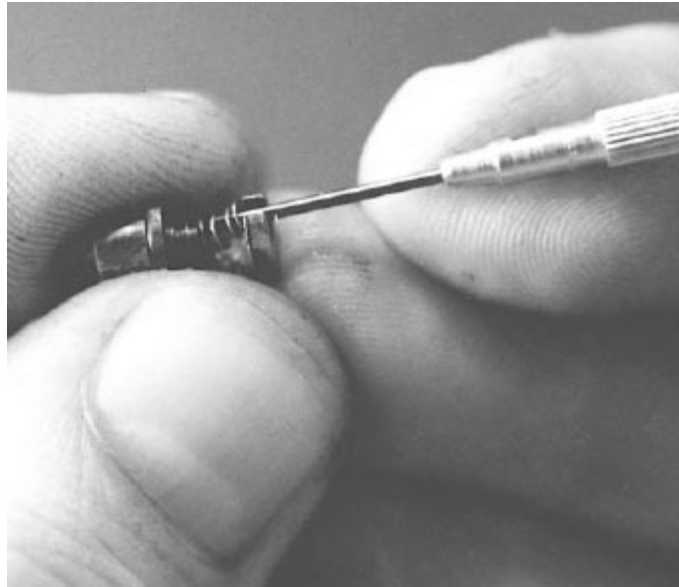
8. Remove the grip safety down and to the rear.



9. Taking out the grip safety will release the takedown/safety release button and its spring for removal toward the left.



- 10.** Move the sear/trigger bar in (to the right) to free its pivot stud from the hole in top left center of the frame, and lift out the bar toward the top. The sear spring is attached to the rear of the bar, and the disconnecter and its spring are housed in the front.

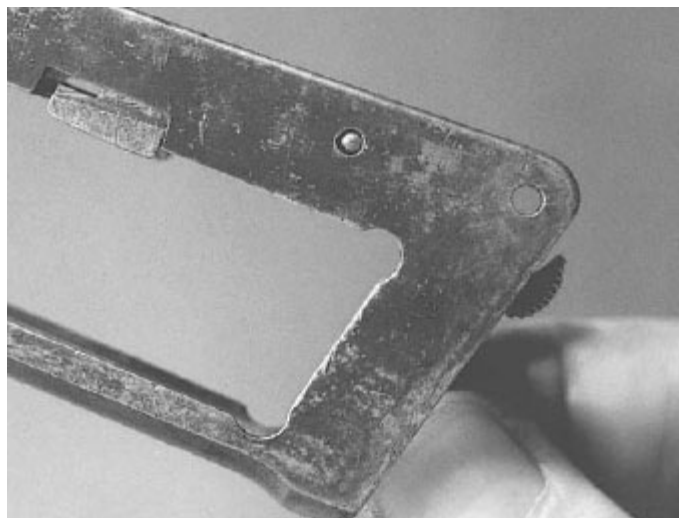


- 11.** Insert a small screwdriver into the end of the disconnecter spring, and ease it upward from its recess for removal. The disconnecter can now be moved out of its hole and taken out. The disconnecter and its spring are rather small, so take care that

they are not lost.



- 12.** The trigger is retained by a cross-pin. After removing the pin, the trigger is turned down, into the trigger guard, for removal. The trigger spring and its plunger will come out with the trigger.



- 13.** The smaller of the two cross-pins in the back of the grip frame retains both the magazine catch and the grip retainer, and their

common spring.

Reassembly Tips:

About midway in the firing pin (striker) channel in the inside top of the slide there is an angled notch. After the firing pin is installed, and before the slide is put back on the frame, use a tool to compress the striker spring and move its follower into this notch. This will hold the spring and follower out of the way during replacement of the slide.

CAUTION: *While handling the slide during installation on the frame, keep a fingertip over the rear opening of the striker channel in case the striker spring follower slips from its notch. While the striker spring follower is in its detent notch, take care to keep the rear of the slide aimed away from your face.*

When replacing the trigger bar in the frame, put the forward end into its well above the trigger first, then move the rear portion down into the frame and to the left to seat the pivot stud in its hole. It may be necessary to depress the disconnecter when inserting the front part of the bar.

Note that the recoil spring is of larger diameter at its forward end. Be sure that end is toward the muzzle in reassembly.

Radom P-35



Data: Radom P-35

Origin: Poland

Manufacturer: Fabryka Broni, Radom

Cartridge: 9mm Luger (Parabellum)

Magazine capacity: 8 rounds

Overall length: 8 inches

Height: $5\frac{5}{8}$ inches

Barrel length: $4\frac{3}{4}$ inches

Weight: 39 ounces

We have chosen to refer to this venerable Polish sidearm as the Radom, because that's the name best-known by most shooters and collectors. Its official names were "VIS" and P-35, the latter indicating its year of adoption by the army of Poland. Late Nazi-occupation pistols may lack the takedown-latch, and they may have roll pins rather than solid cross-pins. Otherwise, they are mechanically the same.

Field Strip:



1. With the magazine removed and the hammer cocked, draw the slide back and engage the disassembly latch. If the pistol is of wartime manufacture and lacks the latch, position the slide to align the semi-circular cut in its lower edge with the front of the slide latch.



- 2.** Pull the recoil spring guide forward, and push on the right tip of the slide-latch cross-shaft, to start the latch out of the frame.



- 3.** Remove the slide-latch toward the left.



4. Release the slide (restrain it) by turning the disassembly latch downward, and remove the slide assembly toward the front.



5. Turn the recoil spring unit to the position shown, and remove it from the underside of the slide.

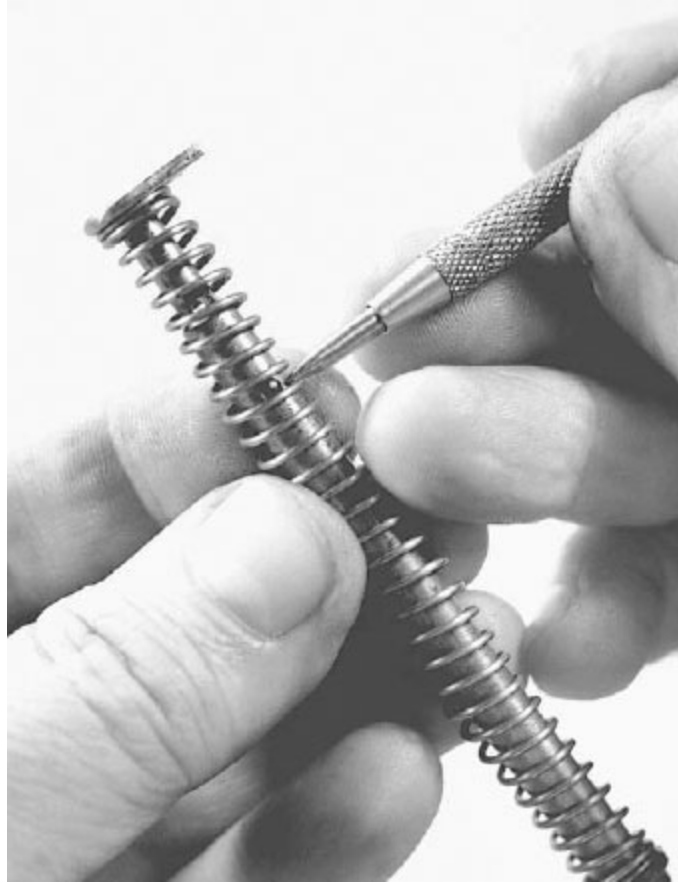


6. Remove the barrel from the underside of the slide. **Gun is now field-stripped.**



Radom P-35 field-stripped

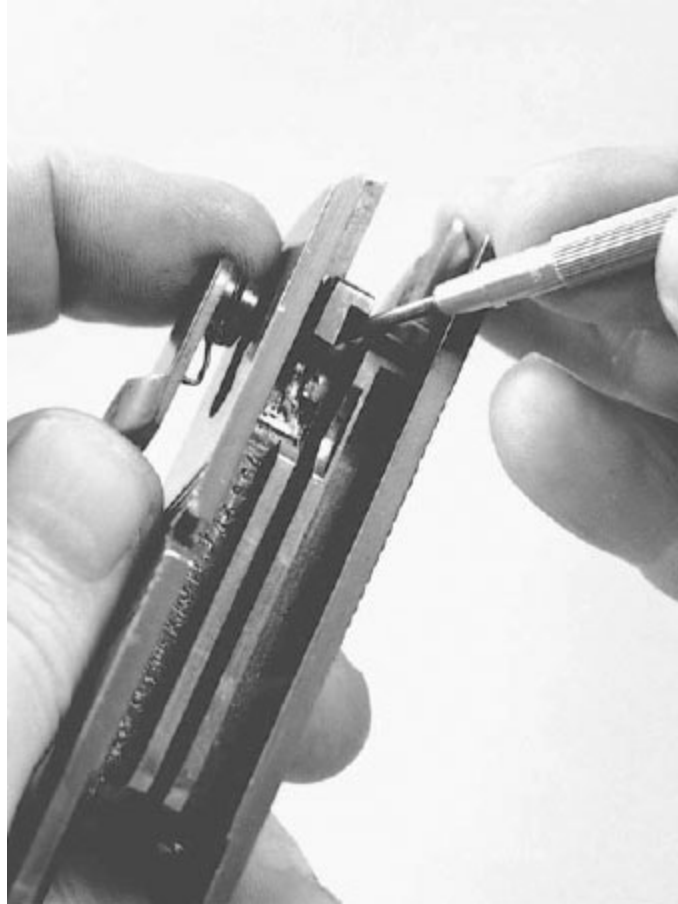
Detail Strip:



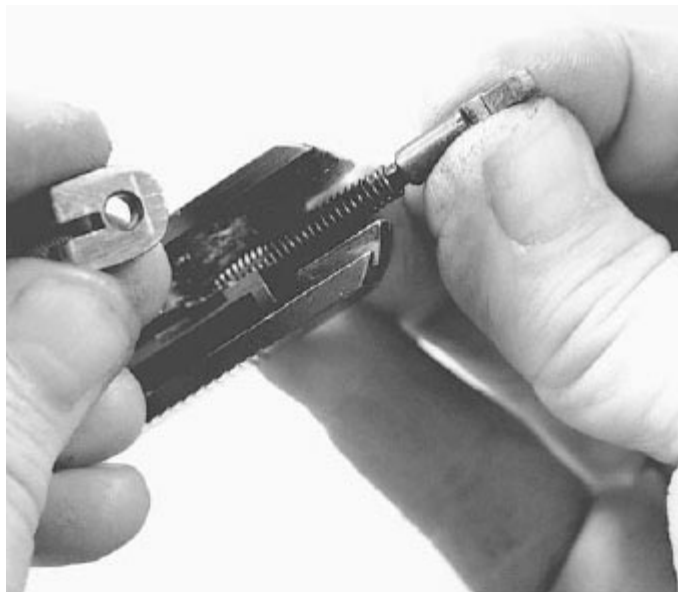
7. The recoil spring unit may be disassembled by drifting out a cross-pin—actually, with the rear plunger depressed, it is pushed —out but as the plunger shaft is deeply slotted at its center, it is subject to breakage. Unless replacement of the recoil spring, the plunger, or its spring is necessary, it is best to leave this assembly intact. If it is disassembled, take care that the collar or bushing at the front of the recoil spring is not lost.



- 8.** Fully depress the firing pin, and move the firing pin retainer slightly downward, until its front projection clears the flange of the hammer-drop lever.



9. Use a tool to nudge the hammer-drop lever out toward the left. The lever spring is easily detached, if necessary.



- 10.** Remove the firing pin retainer, and take out the firing pin and its spring toward the rear. **CAUTION:** *The spring is under tension.*



- 11.** Use a small tool to gently pry the extractor slightly toward the rear. It will stop when its forward beak reaches the breech face.



- 12.** Push the extractor beak toward the right and nudge it toward the rear after it is clear of the edge of the breech face.



13. Remove the extractor toward the rear.



14. Fully depress the magazine catch, and turn the screw-slotted head of the retainer counterclockwise until it stops. Remove the magazine catch assembly toward the right.



- 15.** The catch assembly can be taken apart by turning the retainer clockwise, and easing out the retainer and spring. **CAUTION:** *The spring is under tension.*



- 16.** With the hammer in the fired position, drift out the cross-pin at the lower rear of the grip frame.



17. Remove the mainspring housing downward.



18. The spring and plunger can be removed from the housing by gripping the housing in a padded vise, depressing the plunger, and pushing out the small pin near the top of the housing.
CAUTION: *This powerful spring is under tension, so control it.*



- 19.** The combination sear, disconnect, and grip safety spring can be taken out downward at this point.



- 20.** Turn the takedown-latch to its uppermost position, and insert a tool to spring it slightly outward while continuing to turn it upward.



21. Turn the takedown-latch to the position shown, and remove it toward the left.



22. Remove the grip safety toward the rear.



23. Remove the hammer pivot pin toward the left.



24. Remove the hammer assembly toward the rear. The strut can be taken off by drifting out the pin.



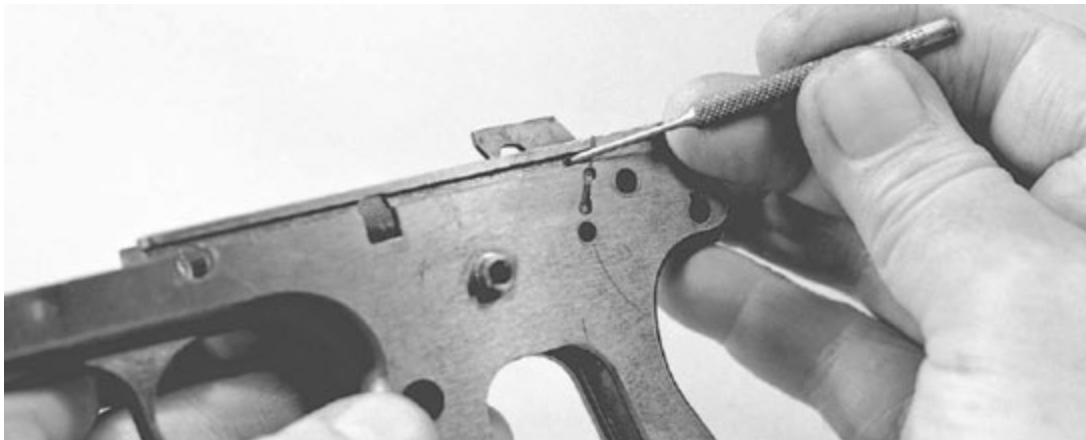
25. Remove the sear and disconnector pin toward the left.



26. Remove the sear and disconnector downward and toward the rear.



27. Remove the trigger rearward and downward.

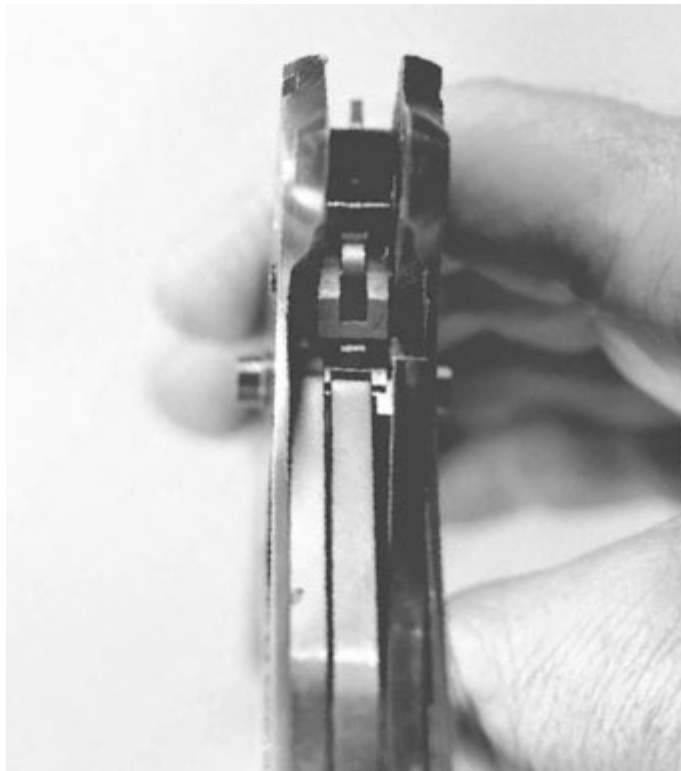


28. The ejector is retained by a cross-pin that is barely visible in the slide track. Unless repair is necessary, it is best to leave it in place. If removal must be done, the extractor is taken off upward, after the pin is driven out.

Reassembly Tips:



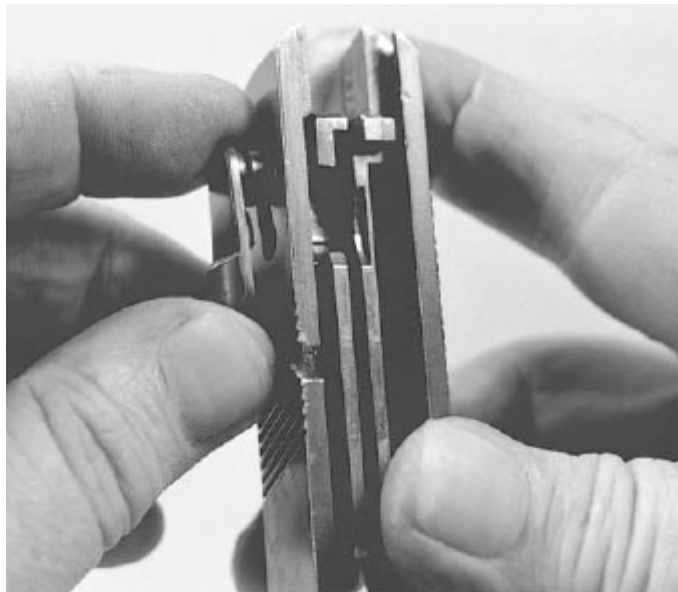
1. The disconnector and sear are shown here in the proper relationship for reassembly.



2. Be sure that the left arm of the combination spring engages the sear, and the center arm the slope of the disconnecter. When the lower tip of the spring is in its slot in the frame, sliding the mainspring housing in part-way will hold it in place.



3. When replacing the firing pin, remember that the flat portion at the rear must be toward the bottom of the slide.



4. Remember that the firing pin retainer is first pushed in just far enough to hold the firing pin, and is not fully seated until the hammer-drop lever is installed.



- 5.** When the hammer-drop lever is almost in place, insert a small tool to engage the lever spring with its shoulder in the slide.



- 6.** Reinsertion of the slide-latch is made easier by pulling forward on the recoil spring guide.

Ruger LC-9



Data: LC-9

Origin: United States

Manufacturer: Sturm, Ruger & Co.
Prescott, AZ

Cartridge: 9mm Luger

Magazine capacity: 7

Overall length: 6 inches

Height: 3.12 inches

Barrel length: 4.5 inches

Weight: 17.6 ounces

The LC-9 is Ruger's entry into the subcompact 9mm concealed carry market. It is a thin, attractive, full powered 9mm which is easily concealed and carried on one's person. It also has full controls including a safety, slide stop, and an easily-manipulated takedown. Introduced in 2011, it is a double action only pistol, however it also has the distinction of requiring the slide to be operated in order for the trigger to be functional, which is a somewhat unusual design but one which it shares with its little brother the LCP and similar offerings by Kel-Tec.

Field Strip:



1. With the slide locked to the rear and the magazine removed, push the takedown plate straight down. The takedown plate is plastic, so only finger pressure should be needed. This exposes the

takedown pin.



2. The slide must be retracted about 1/8th of an inch to align the slide with the takedown pin. Then insert from the right side a 1/16th inch punch and push the takedown pin out and to the left.



3. Then pull the slide from the front of the frame.



4. Remove the recoil spring and guide rod.



5. Tilt the barrel up and pull it out toward the rear of the slide.
Caution: *The recoil springs are not captive and can be removed from the guide rod.*

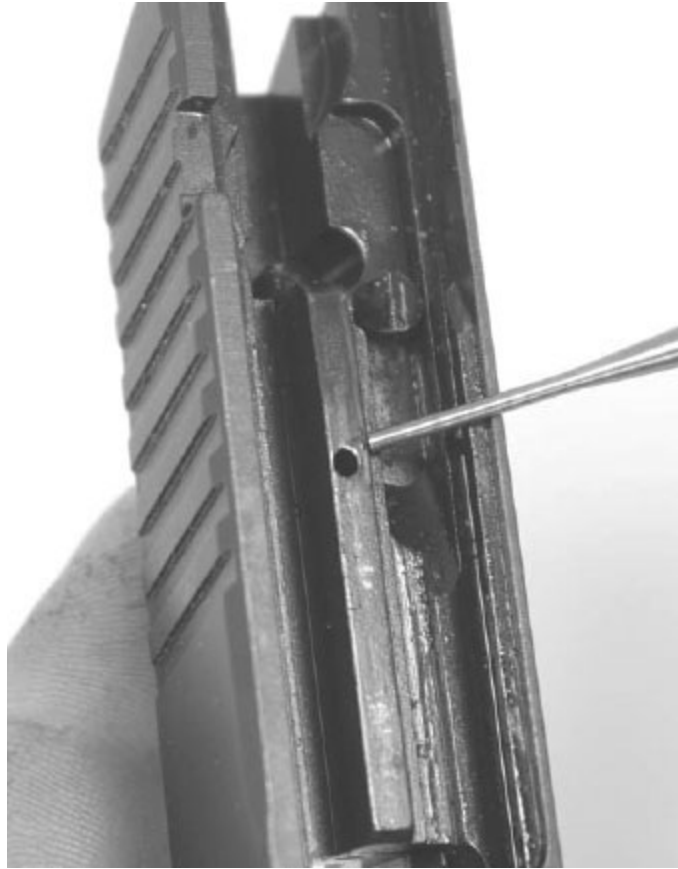


Ruger LC-9 field stripped

Detail Strip:



- 6.** Drive out this pin to remove the loaded chamber indicator and its spring.



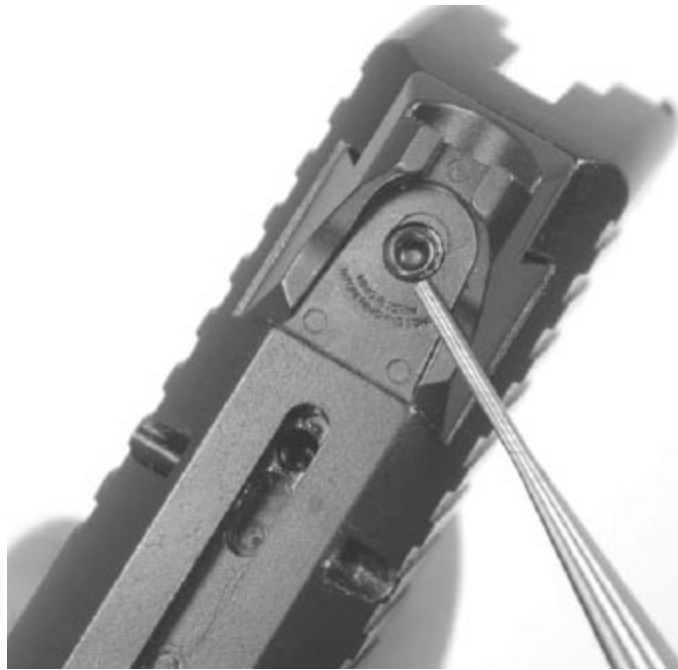
7. This hole on the bottom of the slide is used to push out the firing pin retainer through the slot that houses the loaded chamber indicator.



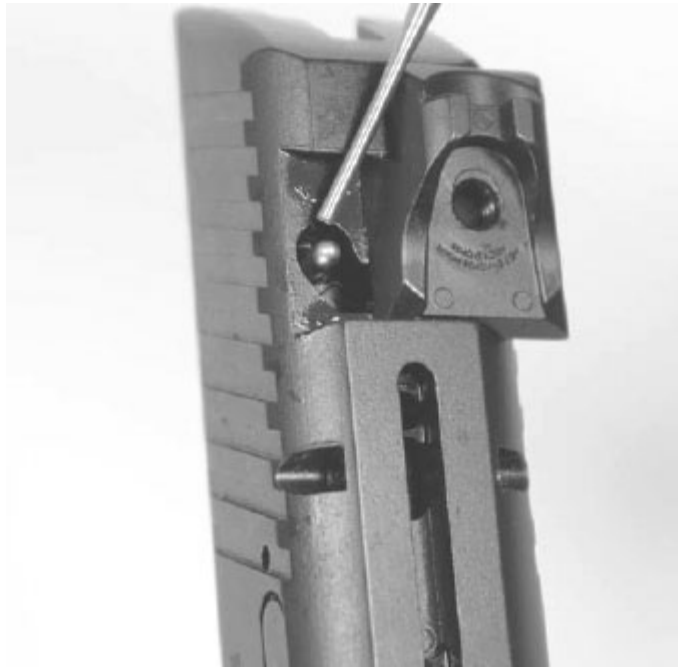
8. Push out the firing pin retainer.



9. Depress the firing pin blocker and the firing pin will shoot out the back of the slide.



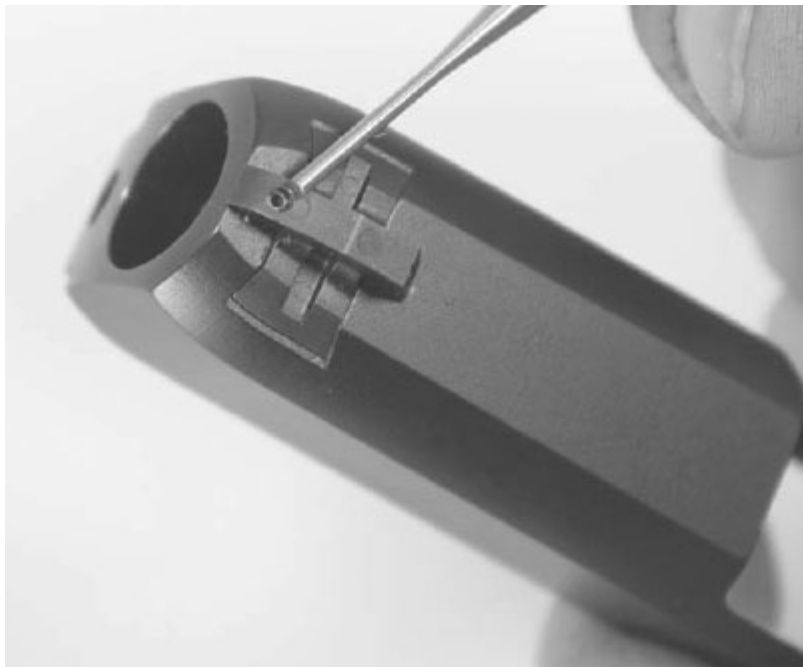
10. Remove the rear sight screw to remove the rear sight.



11. As the rear sight is removed, the firing pin blocker and its detent and spring will be found under the rear sight *and are under tension*.



- 12.** To remove the extractor, first pull the extractor out as far as it can be pulled, then insert a paperclip into the small hole just behind the extractor so that the paperclip will retain the extractor's detent and spring. Then release the extractor and roll it forward into the ejection port to remove it.



- 13.** To remove the front sight, drive this pin into the slide and drift the front sight out to the left or right.



- 14.** Depress the small pin above the magazine latch to dislodge the magazine spring from its seat.



- 15.** Reach inside the frame and pull the magazine spring up and out of the frame. The magazine latch can now be pushed out to the right.



- 16.** Slide a punch under the hammer spring seat and lift it straight up and out of the magazine well. This exposes the hammer anchor pin.



- 17.** The hammer anchor pin must be pulled out and removed in order to release the hammer spring. The use of a forked tool such as a Smith & Wesson rebound spring tool would be advised. *The hammer spring is under an extreme amount of tension.*



- 18.** To remove the frame insert from the grip frame, these two large plastic pins should be driven out. They may be driven out either way.



19. With pins removed, slowly remove the frame insert from the grip frame. As you do so, the takedown plate will flow free.



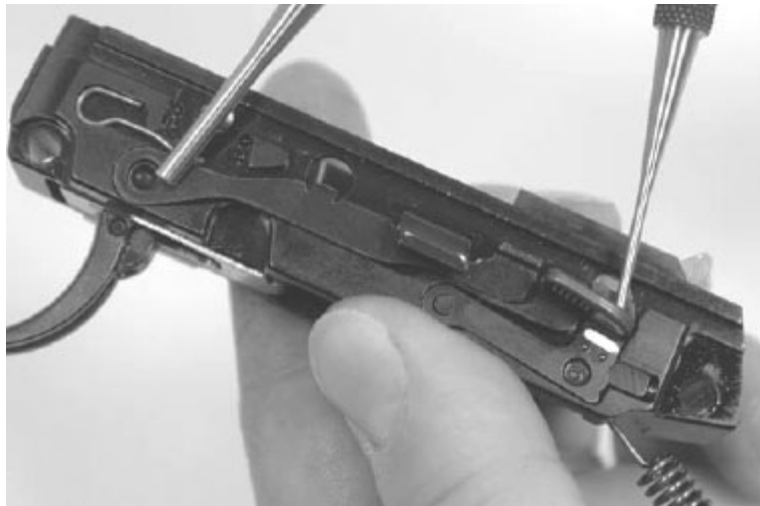
20. The hammer catch should not be removed except by the factory.



21. To remove the magazine latch spring, its leg must be depressed out of its hole and then it can be pried out of the frame. This will require a very small punch. Then the magazine latch can be removed from the grip frame out and to the right.



- 22.** Pull the trigger spring arm out from under the trigger bar and pull the trigger bar off from the frame insert. The trigger spring can be pulled out and removed from the trigger assembly.



- 23.** The slide hold open and the manual safety can now be pulled from the frame insert.



24. Note: The device that places tension on the manual safety is comprised of three parts – the manual safety puck, the manual safety detent spring, and the spring guide. *These are very small parts which are under spring tension.* Carefully remove them so they are not lost.



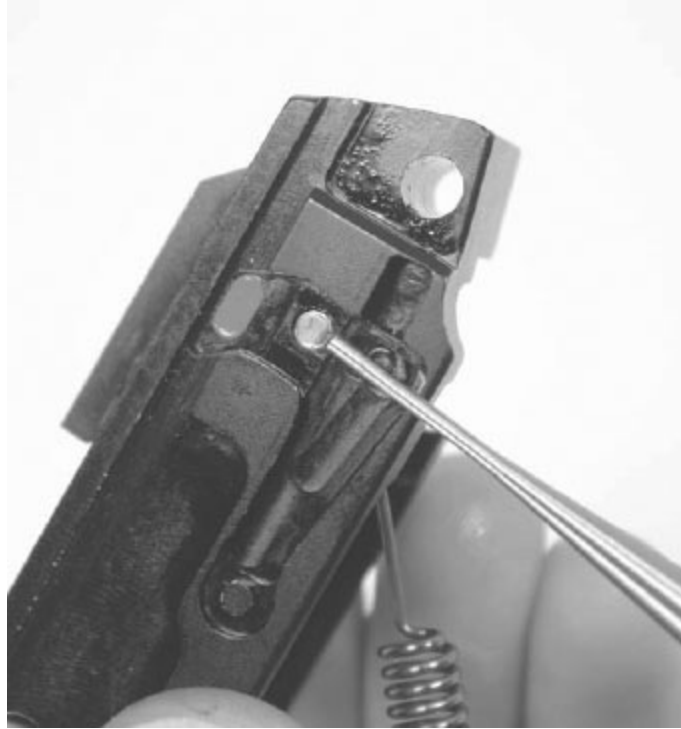
- 25.** Push out the trigger pin located on the underside of the trigger here. This frees up the trigger spring which can now be removed from the right side of the assembly.



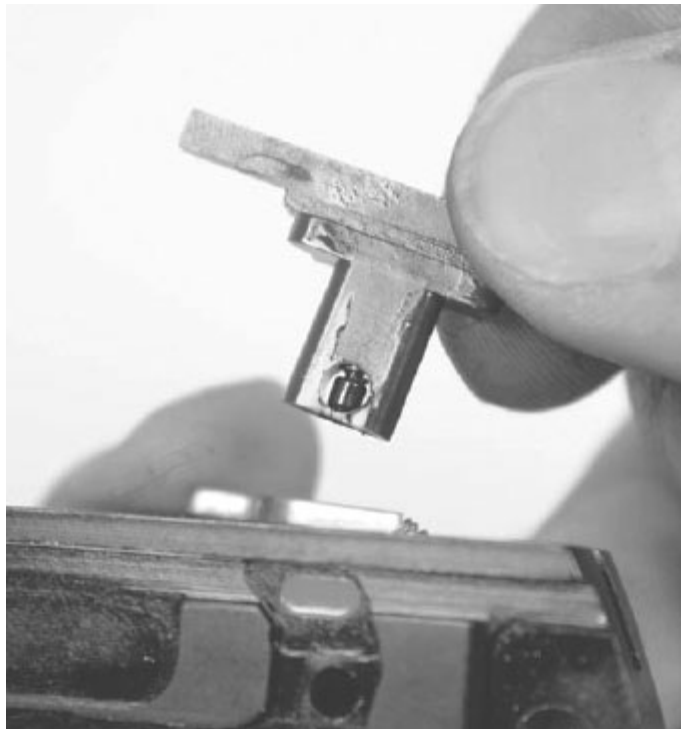
26. The trigger pivot can now be pushed out to the right.



27. The silver plate surrounding the trigger on the underside of the frame insert is the magazine disconnect. Press it forward and then pull the trigger from the bottom of the frame insert. The magazine disconnect and spring can then be removed.



28. Pushing out this pin will release the ejector housing, the hammer, and the blocker lever and its spring.



29. There is a detent and plunger inside the ejector housing. Do not lose them.



30. The slide stop spring can be pried out if necessary.

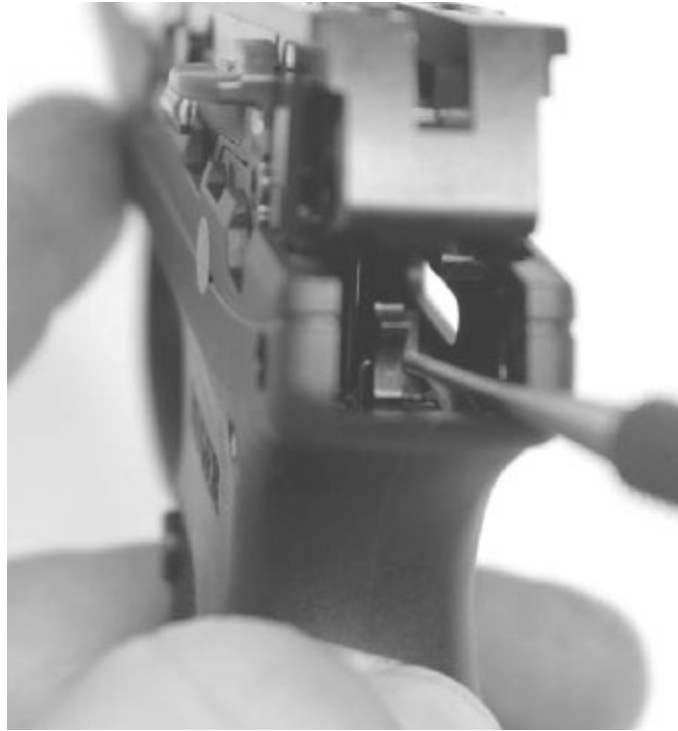


- 31.** If necessary to change the hammer spring, this roll pin can be driven out. However, if this is done, ensure that the split in the roll pin when it's reinserted is pointing toward the hole for the hammer pin. This is only necessary when replacement is warranted.

Reassembly Tips:



- 1.** When reinserting the hammer pin, a small screwdriver can be used so that the hammer pin can be fully inserted.



- 2.** The hammer catch must be held up in a vertical position to engage the hammer as the frame insert is seated into the grip frame. Using a small punch or screwdriver is recommended for this task.



- 3.** To reattach the hammer spring to the hammer anchor pin, first place the pin in its slot then use a hook or a punch to lift the spring over the top. Make sure the spring loop is seated in the groove in the pin.

Ruger LCP

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the LCP also apply to the following gun:
Kel-Tec P-3AT



Data: Ruger LCP

Origin: United States

Manufacturer: Sturm, Ruger & Co.
Prescott, AZ

Cartridge: .380 Auto

Magazine capacity: 6 rounds

Overall length: 5.16 inches

Height: 3.6 inches

Barrel length: 2.75 inches

Weight: 9.4 ounces

Ruger's LCP is a palm-sized .380 Auto pistol with a six-round magazine capacity. It is quite thin. Very lightweight, and small enough to be concealed in a pants pocket, this handgun has sold robustly and is very popular. Clearly a cousin of the Kel-Tec P-3AT, the takedown for that handgun is very similar.

Field Strip:



- 1.** With the magazine out and the slide closed, gently pry out the takedown pin to the left and pull it completely out of the pistol.



2. Remove the slide assembly from the frame.



3. Remove the guide rod and recoil springs.



4. Remove the barrel by lifting it up at the rear and pulling it from the slide.



Ruger LCP field stripped

Detail Strip:



5. Drive out this pin to free the firing pin and firing pin spring.



6. A small probe can be inserted into this hole to lever the extractor plunger back far enough to remove the extractor. The extractor can be rolled into the ejection port.



- 7.** Depress this catch in the backstrap and pull the hammer spring seat from the grip.



- 8.** Unhook the hammer spring from its pin to release hammer spring tension. Remove the pin.



9. Drive out this pin at the rear of the frame.



10. Drive out this pin which sits above the trigger.



11. The frame insert can now be removed from the frame.



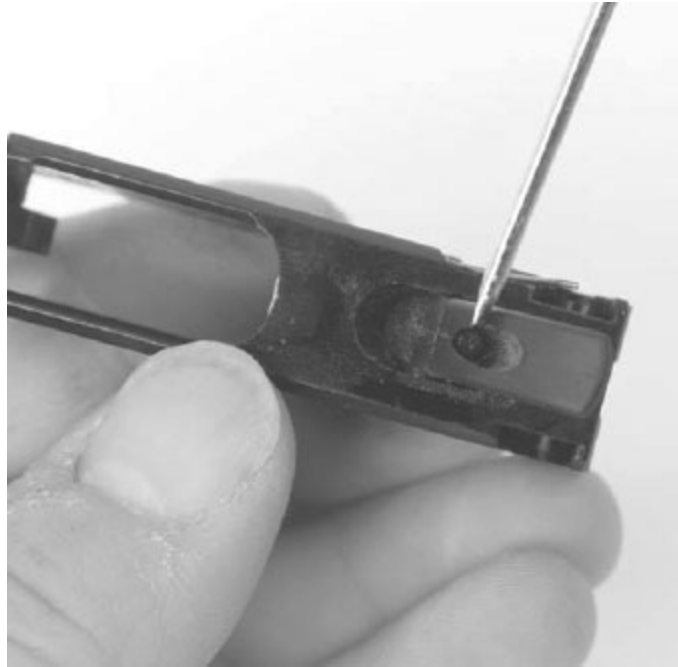
12. The takedown pin spring can be lifted from its alcove.



- 13.** Dislodge the slide hold-open spring from the slide hold-open and lift the hold-open out of the frame insert.



- 14.** Remove the trigger bar.



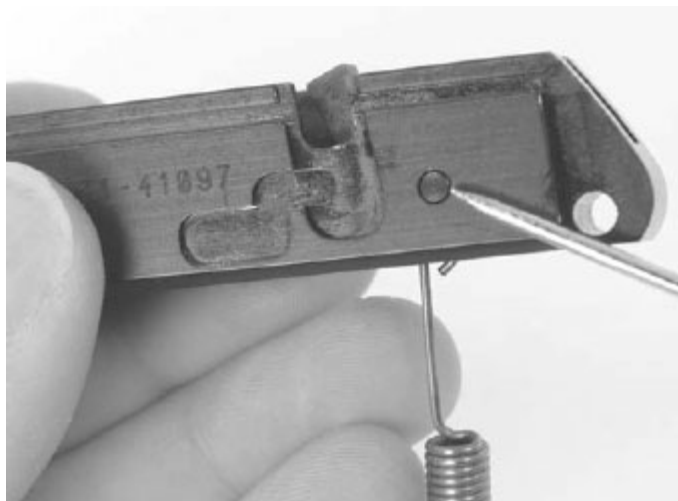
15. Drive this pin out through the top of the trigger.



16. Pull the trigger spring out of the trigger pin.



17. Remove the trigger pin by pushing it out to the right, and the trigger can be pulled out of the bottom of the frame insert.



18. Push out the hammer pin to remove the hammer.



- 19.** The hammer spring pin retaining pin need only be removed if the hammer spring requires replacement.



- 20.** To remove the magazine catch, lift the spring straight up out of the frame and push the magazine latch catch out to the right of the frame.



- 21.** The hammer catch and spring assembly should not be removed outside of the factory. If service here is necessary, return the gun to the manufacturer.

Reassembly Tips:



1. When reinstalling the frame insert into the frame, use a thin tool to hold the hammer catch forward to ensure that it engages the hammer properly as the frame insert is fully seated in place.



2. Re-hooking the hammer spring on the hammer spring pin is easier with the hammer forward and using a hollow-nosed punch to grab onto the hammer spring.



- 3.** Note that the location of the hook is on the right side groove of the hammer spring. If it is on the left side, the spring will rub against the inside of the frame.

Ruger P-85

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Ruger P-85 also apply to the following guns:

Ruger P-89

Ruger P-90

Ruger KP-94

(but not the polymer-frame P-95)



Data: Ruger P-85

Origin: United States

Manufacturer: Sturm, Ruger & Co.,

Southport, Connecticut

Cartridge: 9mm Luger (Parabellum)

Magazine capacity: 15 rounds

Overall length: 7.84 inches

Height: 5⁷/₈ inches

Barrel length: 4¹/₂ inches

Weight: 32 ounces

The long-awaited 9mm double-action pistol from Sturm, Ruger and Company finally arrived in good quantity in 1988, and soon confirmed its own testimony to Ruger reliability. Very early P-85 pistols had a larger slide-latch with a different shape, and a few other small differences. However there were no mechanical changes that would affect takedown or reassembly. The later models also have other small differences mechanically, but these should be easy to figure out.

Field Strip:



1. Lock the slide in open position, and remove the magazine. Exert upward pressure on the slide-latch to insure that it isn't moved out of engagement. With a fingertip or tool, tip the ejector over forward into the magazine well. It will lock in that position.



2. Restrain the slide, release the latch, and ease the slide forward. The hammer will fall to its fired position. Retract the slide about $\frac{1}{8}$ -inch while exerting pressure on the right tip of the slide-latch, to start it out toward the left.



3. Pull the slide-latch out until it stops. It is not removed at this point.

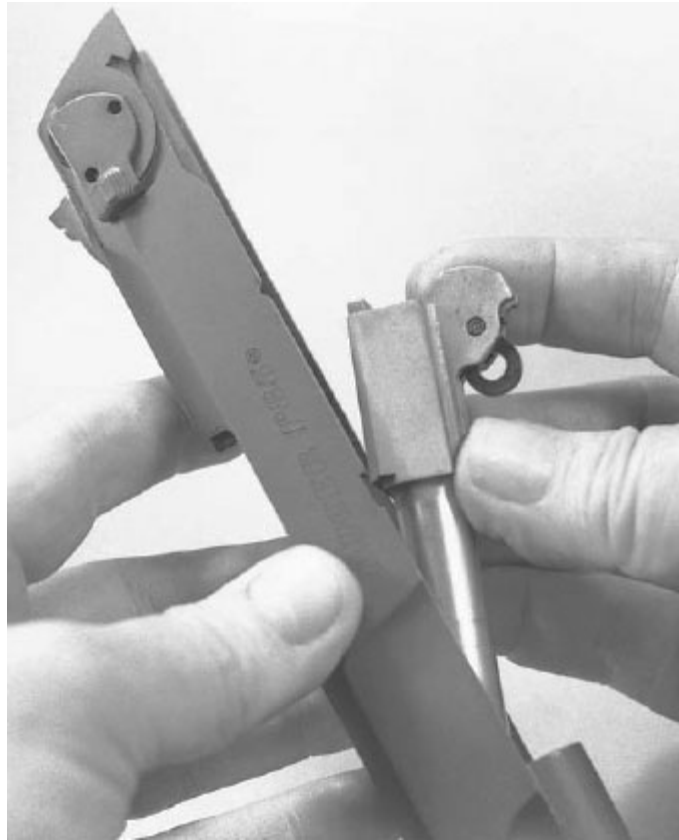


4. Remove the slide and barrel assembly toward the front.



5. Keeping a tight grip on the recoil spring unit, disengage the guide from the underlug of the barrel, and remove the guide and

spring. **CAUTION:** *This strong spring is under tension—control it.*



6. Move the barrel slightly forward, then remove it from the underside of the slide. The link can be removed from the barrel by drifting out the cross-pin, but in normal disassembly this is left in place. **Gun is now field-stripped.**

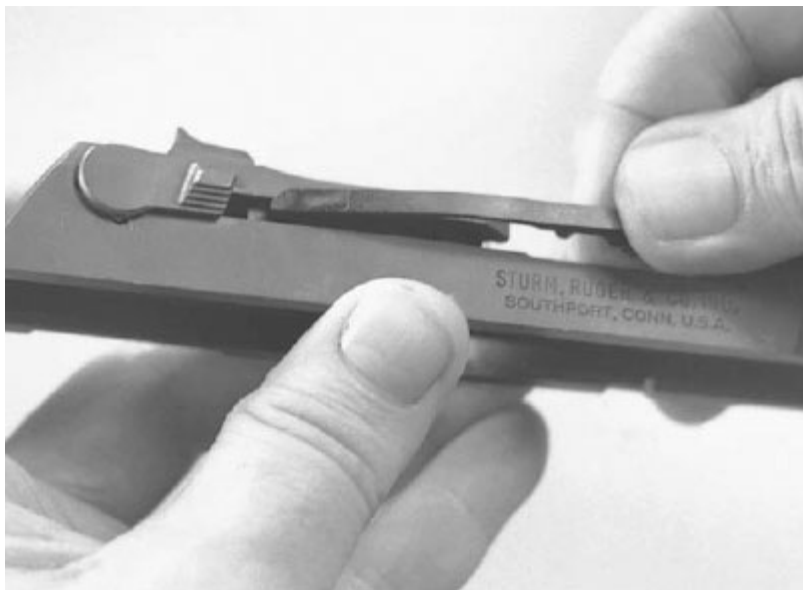


Ruger P-85 field-stripped

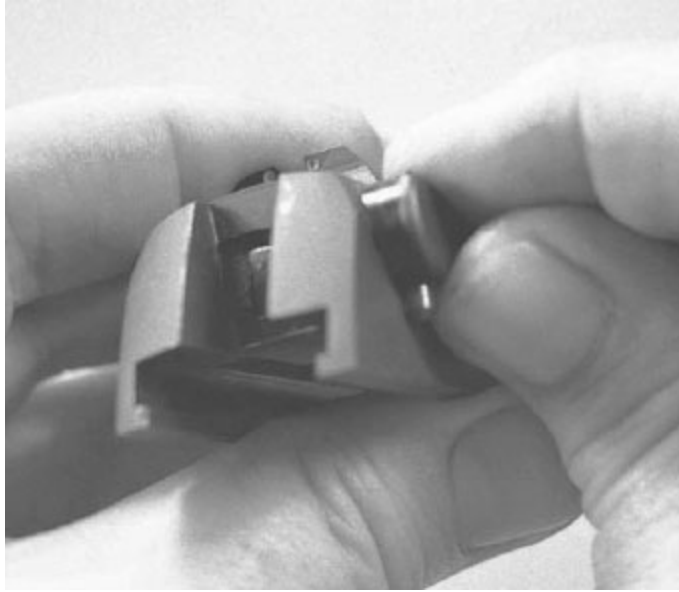
Detail Strip:



- 7.** With a tool, flex the extractor outward until it can be levered forward.



- 8.** Remove the extractor forward and toward the right.



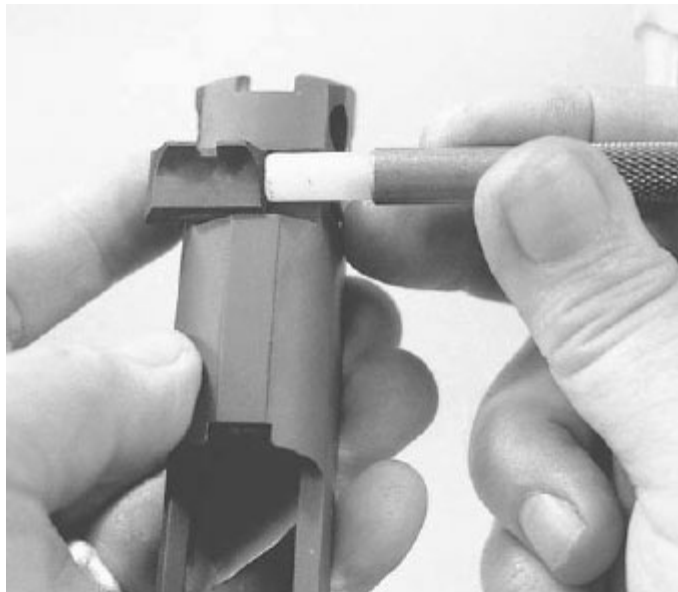
9. With the safety-levers in off-safe position, use a thumbnail or non-marring tool to nudge the right safety-lever outward. Keep a fingertip below the lever, to catch the positioning plunger and spring, which will be released downward as it clears the slide.



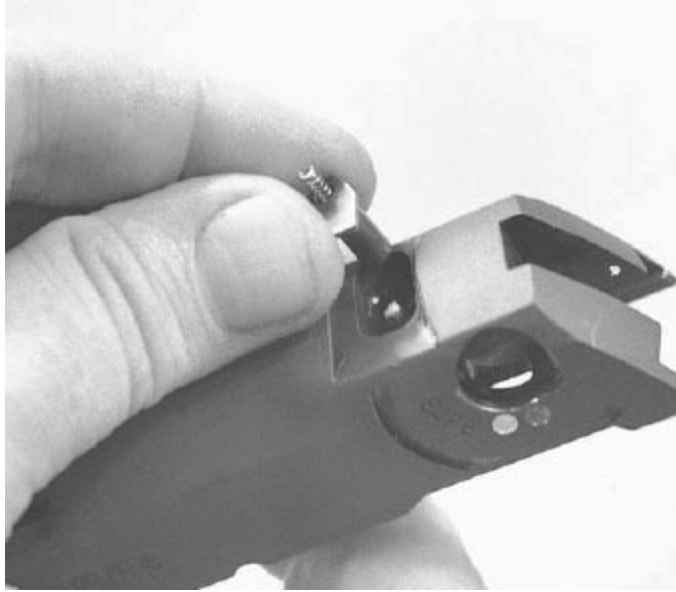
10. Turn the left safety-lever to the position shown, a little past on-safe position, and remove it toward the left. **CAUTION:** *Restrain the firing pin, which will be released as the safety clears the slide.*



11. Remove the firing pin block and its spring upward.



12. Use a non-marring tool to drive the rear sight out of its dovetail toward the right. Restrain the firing pin block spring as the sight clears it.



13. Remove the firing pin and its spring toward the rear.



14. The front sight is retained on the slide by two roll pins, and is removed upward after the pins are driven out. In normal takedown, the front sight is not removed.



- 15.** The grips are tightly fitted. After removal of the grip screws, insert a fingertip to gently pry the lower portion of the grip outward. With the grips removed, insert a tool to depress the top of the magazine catch spring, and remove the right magazine catch button toward the right.



- 16.** Repeat this operation on the left magazine catch piece. It must be tipped forward to clear, and may need to be nudged from inside the frame.

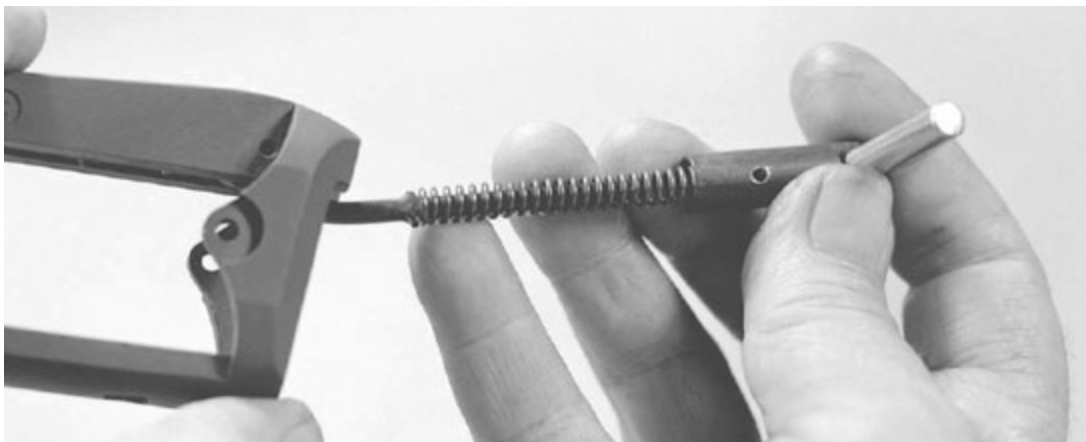


- 17.** Tip the magazine catch spring toward the rear, into the magazine well, and remove it upward.



- 18.** With the hammer in fired position, insert a drift through the lanyard loop to aid in restraining the hammer spring base, and drift out the cross-pin at the lower rear of the grip frame.

CAUTION: *When the drift is removed from the pin hole, the base will be freed, and the spring is powerful. Control it.*



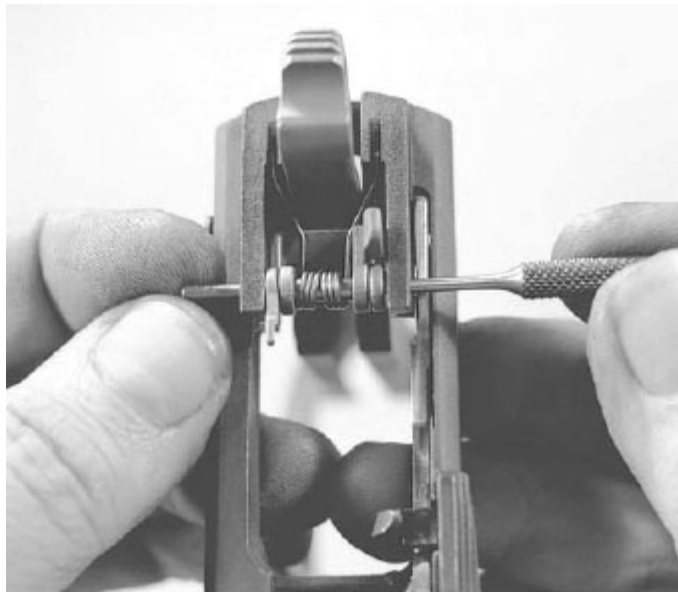
- 19.** Ease out the hammer spring base, and remove the base, hammer spring, and hammer strut downward.



20. With the ejector in raised position, push out the ejector pivot pin toward either side.



21. Remove the ejector and its spring forward, into the magazine well.



22. Push out the sear cross-pin toward either end.



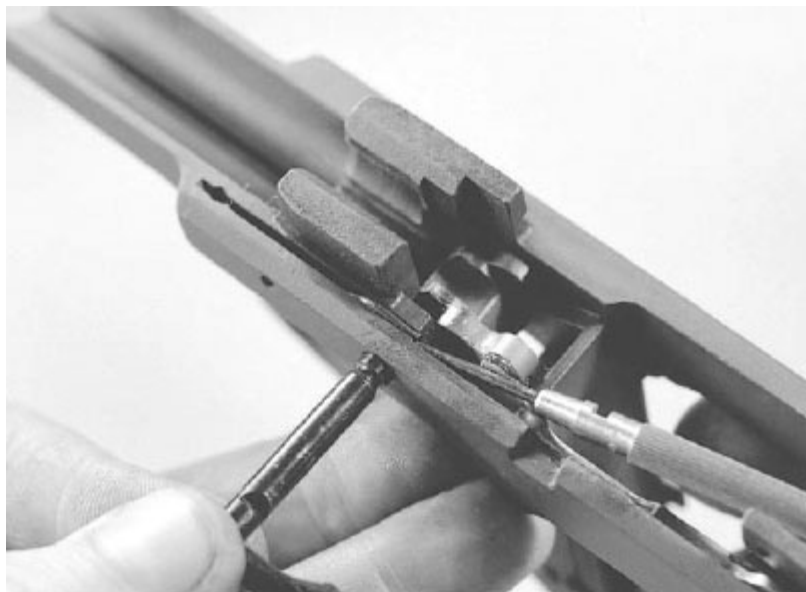
- 23.** Move the hammer back to the cocked position. Move the sear assembly forward, and tilt it upward on the right, as shown, to free the sear arm from the trigger bar. Remove the sear unit upward.



- 24.** Pushing out the hollow pivot in the sear unit will allow separation of the sear and blocker lever, and the two torsion-type springs. Unless repair is necessary, this unit is best left assembled. **CAUTION:** *Springs are under tension.*



- 25.** Pull out the hammer pivot, and move the hammer forward and up for removal.



- 26.** Insert a tool to lift the tip of the slide-latch spring from its groove in the cross-shaft of the latch, and remove the slide-latch toward the left.

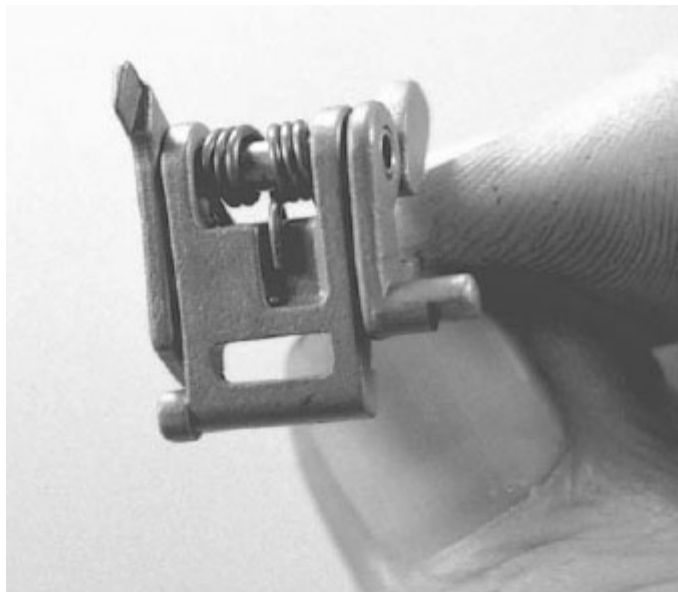


27. Remove the trigger assembly upward. The trigger and trigger bar are easily separated.



28. Drifting out the small pin above the guard (inward) will release the slide-latch spring for removal upward. As the drift is withdrawn, it will also release the retaining plug for the trigger spring and plunger, and these three parts are removed toward the front. **CAUTION:** *Both springs are under tension, so control them as the drift is pulled out.*

Reassembly Tips:



1. If the sear unit has been disassembled, be sure the sear, blocker lever, and the two springs are reassembled as shown.



2. When pushing the sear unit back into place for insertion of the cross-pin, use a tool to guide the spring tails into the grooves at the rear.



3. When replacing the ejector and its spring, hook the spring arm onto the ejector before it is inserted in the frame, then use a tool

to push the coil of the spring into place for insertion of the cross-pin. Be sure the sear contact arm of the ejector is *behind* the sear projection.



4. When replacing the firing pin, be sure it is oriented as shown. Remember to depress the firing pin block as the pin is pushed into place.



5. As the right safety-lever is installed, a tool must be used to

depress the positioning plunger as the safety is pushed into place.



6. When installing the extractor, keep pressure on its mid-point at the side while pushing it toward the rear. Use a non-marring tool at the front.



7. Be sure the extractor is fully to the rear and locked in place. When properly installed, it will have an arch at the center and will go inward at the front and rear, as shown.



8. Remember that before the slide can be put back on the frame, the disconnect must be tipped over forward, just as it was in the initial takedown step.

Ruger SR-9

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the SR-9 also apply to the following gun:

Ruger SR-9C

Ruger SR-40

Ruger SR-40C



Data: Ruger SR9

Origin: United States

Manufacturer: Sturm, Ruger & Co.
Prescott, AZ

Cartridge: 9mm Luger

Magazine capacity: 17 rounds

Overall length: 7.55 inches

Height: 5.52 inches

Barrel length: 4.14 inches

Weight: 26.5 ounces

Nobody ever thought that Ruger would come out with a striker-fired handgun. This was a field dominated by Glock, S&W, and others. But since 2007 Ruger has successfully introduced the SR series of handguns, available in 9mm and .40S&W in full size and compact versions with either a black or stainless steel slide. Like many in its “weight class,” it has an adjustable back strap. It also includes a manual safety in addition to an internal safety that is common in striker-fired pistols. The SR-9 is a solid, full-sized handgun.

Field Strip:



1. With the slide locked back, press the takedown pin out to the left side.



2. Close the slide, pull the trigger, and pull the slide off of the frame to the front.



3. Remove the guide rod assembly by lifting it up to the rear.



4. Remove the barrel by tilting it up out of the slide.



Ruger SR-9 field stripped

Detail Strip:



- 5.** Depress the striker cover plunger and push the striker cover down and out of the slide. *The striker and the striker plunger are under spring tension. Control them as the striker is removed.*



- 6.** 6. Depress the magazine disconnect to free the striker assembly and pull the striker assembly from the gun. The magazine disconnect can now also be removed from the slide. The striker plunger and spring can also be pulled from the back of the slide.



- 7.** Drive out this pin to remove the extractor and spring.



- 8.** Drive out this pin to remove the loaded chamber indicator and spring.



9. Removing the extractor will free the striker blocker as well.



10. The front and rear sights can be drifted out to the right if necessary for replacement.



- 11.** Removing this roll pin will allow the striker assembly to be taken apart by allowing the striker spring cup, striker shaft, and striker spring to be pulled from inside the striker.



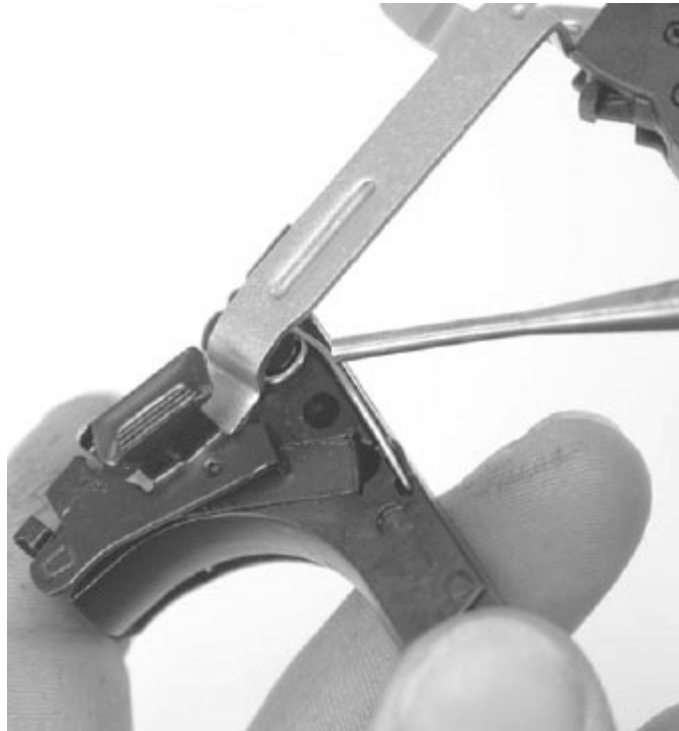
- 12.** Press out all three pins at the front of the frame, including the two above the trigger and the one at the front of the trigger guard.



- 13.** With the ejector positioned like this, press out from right to left the pin at the rear of the frame.



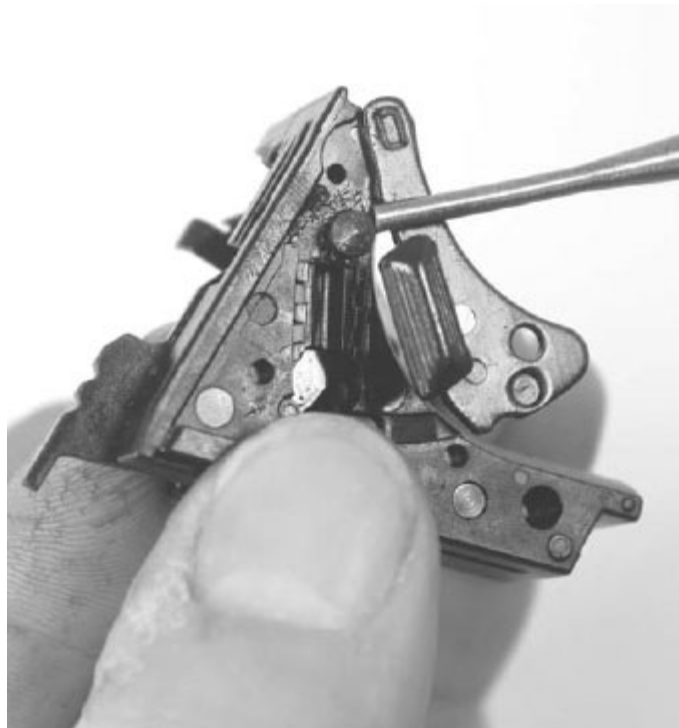
- 14.** At this point, the fire control housing and cam block with trigger can be lifted from the frame. This can be eased by pulling forward slightly on the trigger as you are lifting the fire control housing. The cam block pin retainer which sits on the left side of the cam block will fall free at this point.



- 15.** Remove the trigger bar lift spring from the right side of the fire control housing.



- 16.** Pull the trigger bar forward and tilt it up to free it from the fire control housing. Disconnect the trigger bar from the trigger bar spring.



- 17.** Rotate the thumb safety assembly down until it clears the fire control housing. *As you do this, the detent which is hidden beneath*

the left arm of the safety assembly will be freed and should be controlled, as it is under a great deal of tension.



- 18.** The thumb safety assembly can then rotate further back and be snapped out of its location.



19. The trigger bar reset can then be pulled out of the fire control housing.



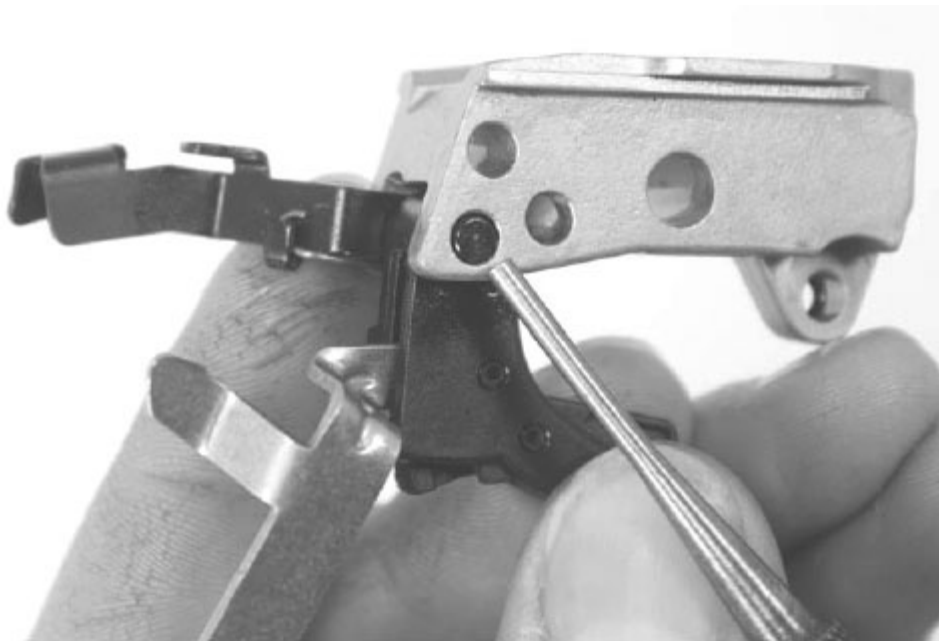
20. Driving out this pin will free the ejector and its detent and spring.



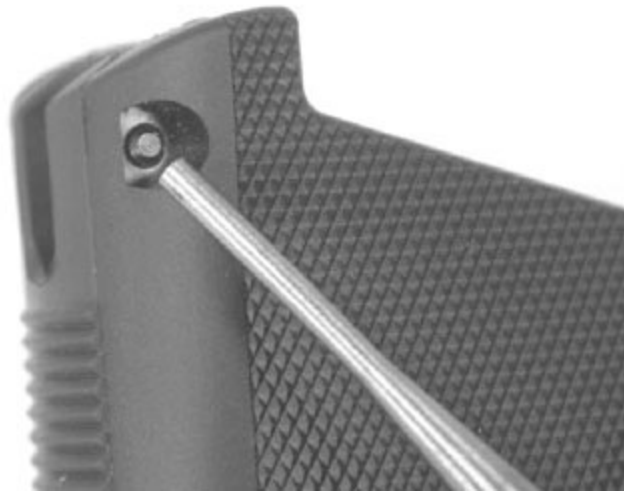
21. Driving out this pin will allow you to remove the trigger bar spring.



- 22.** Driving out this pin will free the magazine latch thumb piece and its spring. It can be pushed out to either side.



- 23.** Driving out this pin will free the trigger and the slide stop from the cam block. Further disassembly of the trigger is not recommended unless replacements are needed.



- 24.** This pin at the base of the grip can be pushed out to allow the back strap to be reversed. There is a bushing in between the fingers of the back strap. Do not lose it!



- 25.** This “o” ring is the front cam block pin retainer. It should not need to be removed unless replacement is necessary.

Reassembly Tips:



1. As with the disassembly, pulling the trigger forward far enough to engage the safety will ease the installation of the fire control housing into the frame.



2. To reinstall the fire control housing pin at the rear of the frame, the ejector should be positioned slightly pushed forward as shown in this picture, with the flat of the pin facing the safety lever.



3. The cam block pin should be reinserted in the frame with the groove to the left.



4. Ensure that the ejector has been fully raised, or the trigger will not properly function.

Ruger Standard Auto

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Ruger Standard Auto also apply to the following guns:

Ruger Mk. I

Ruger Mk. II Bull Barrel

Ruger Mk. II

Ruger Mk. II Government Model

Ruger Mk. II Target



Data: Ruger Standard Auto

Origin: United States

Manufacturer: Sturm, Ruger & Co.,
Southport, Connecticut

Cartridge: 22 Long Rifle

Magazine 9 rounds

capacity:

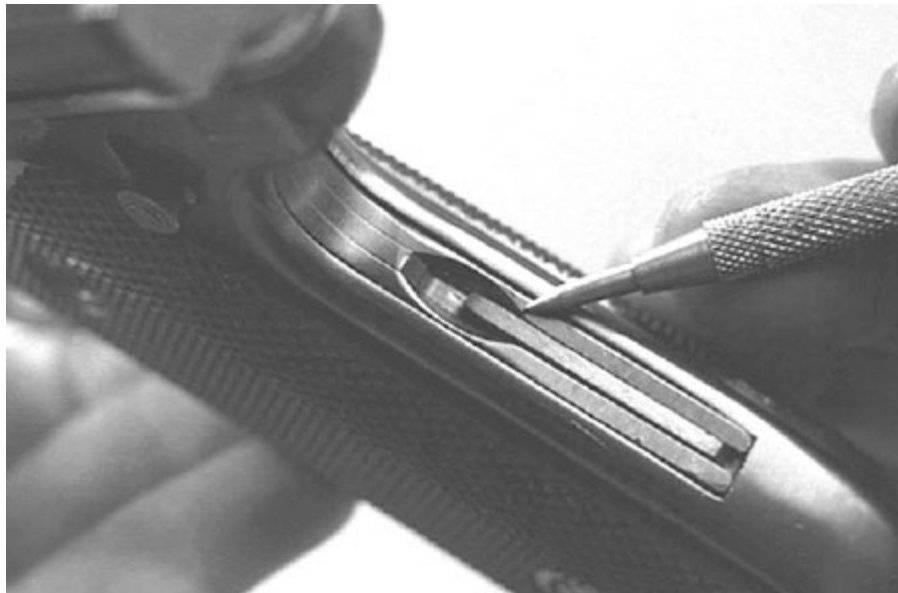
Overall length: $8\frac{3}{4}$ inches ($4\frac{3}{4}$ -inch barrel)

Barrel lengths: $4\frac{3}{4}$ and 6 inches

Weight: 36 ounces

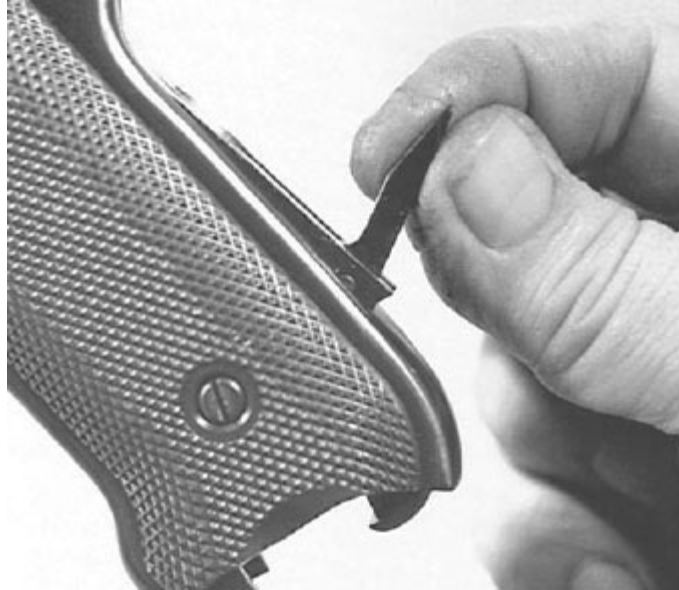
Both the Ruger name and the general shape and balance of this pistol bear a resemblance to a famed German name and handgun—the Luger. Unlike the Parabellum, though, the Ruger Standard Auto is an exercise in simplicity and good mechanical design. The uncomplicated mechanism makes takedown and reassembly easy, but there are still a few points that can cause difficulty for those who are unfamiliar with the pistol. These will be noted in the instructions which follow. The current-production Mark II pistols have an added hold-open latch, but otherwise they are mechanically the same.

Field Strip:



1. The takedown-latch is located in the backstrap of the grip frame.

There is a recess at the top of the latch lever which allows the insertion of a fingertip or any other non-marring tool to pull the lever toward the rear.

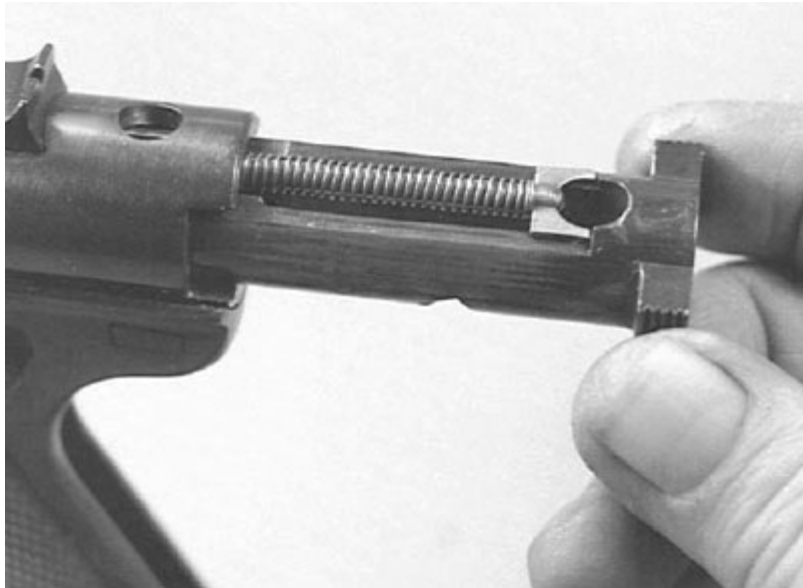


2. With the hammer in lowered position and the magazine removed, pull the latch lever out toward the rear.



3. Swing the mainspring housing out and turn it up toward the rear. Then, pull the housing straight down to withdraw the bolt-stop

pin from the frame and barrel extension.



4. Remove the bolt from the rear of the barrel extension (receiver).



5. Move the barrel and receiver unit forward to free it from the internal hook at the front of the frame. **Note:** On some guns which are tightly fitted, it may be necessary to tap the rear of the receiver with a nylon hammer to move it forward.



6. Lift the barrel and receiver unit from the top of the frame. Gun is now field-stripped.

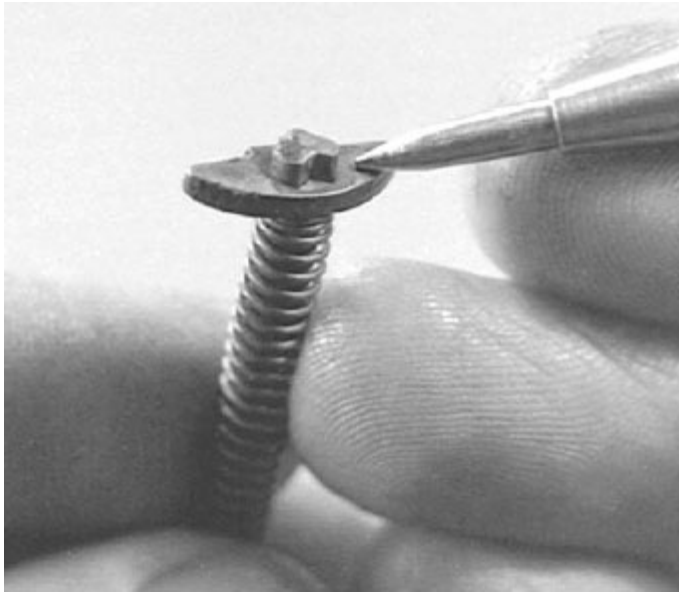


Ruger Standard Auto field-stripped

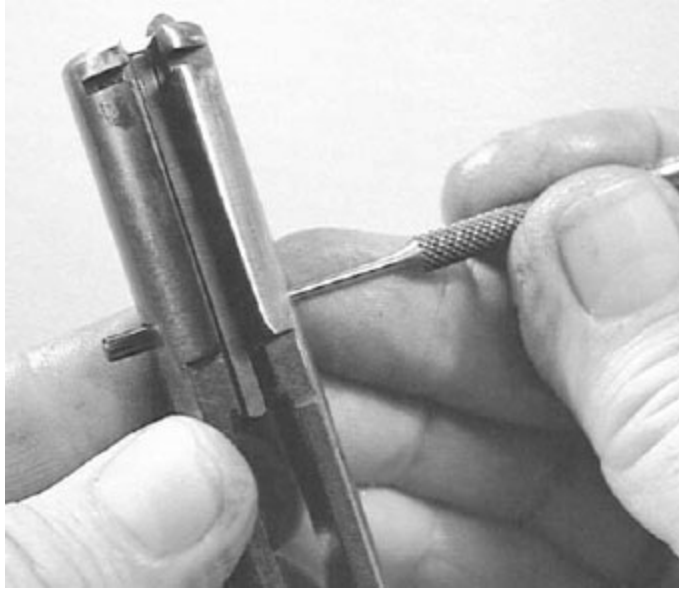
Detail Strip:



7. Lift the recoil spring unit from the top of the bolt.



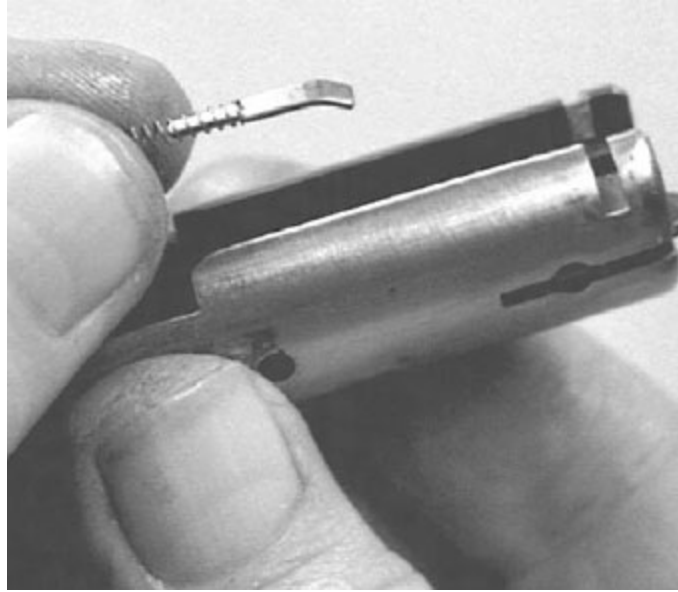
8. The front end of the recoil spring guide is riveted to retain the support cross-piece, and disassembly of this unit is not advisable.



9. From either side of the bolt, push out the firing pin retaining pin.



10. Remove the firing pin from the top of the bolt.



- 11.** Remove the firing pin spring and spring support from the firing pin recess in the bolt.



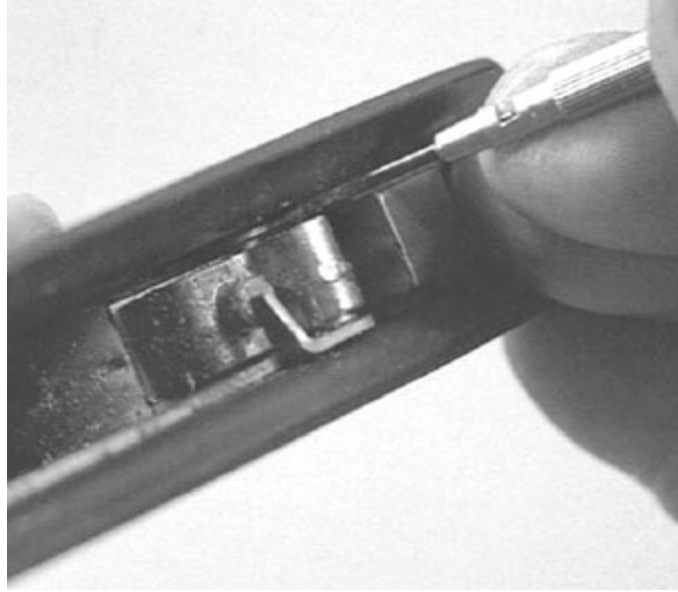
- 12.** With a small, sharp screwdriver, depress the extractor spring plunger and remove the extractor from its recess. **CAUTION:** *Take care to release the tension of the extractor spring slowly, and remove the plunger and spring from the bolt, toward the front.*



- 13.** The large pin at the top of the frame is pushed out to release the hammer for removal from the top. The trigger bar/disconnector will rise with the hammer as it surrounds the hammer pivot on the right side. The hammer pivot (hammer bushing) is easily removed from the hammer, toward the right. The hammer strut can be separated from the hammer by pushing out the small pin at the rear of the hammer, toward the left. The safety catch can now be moved inward and removed from the top of the frame. Pushing out the small pin below the hammer pin will release the sear and its spring, and the smaller pin below the sear pin is the bearing pin for the tail of the sear spring.



14. This view of the top of the frame shows the relationship of the parts mentioned previously.



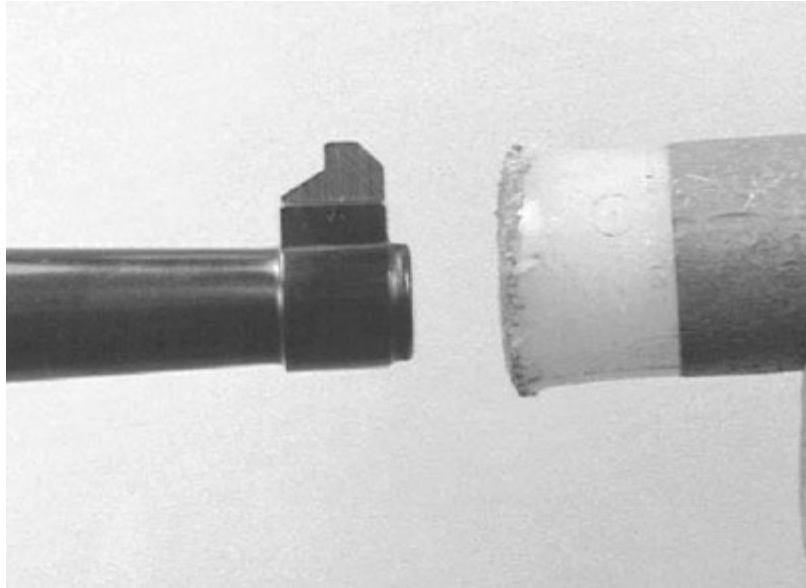
- 15.** The trigger pin is retained in the frame by a small C-clip which grips a groove in the pin on the left side. After the clip is pried from the groove, the trigger pin must be removed toward the left. The trigger is removed upward, and the trigger bar, spring, and plunger are easily separated from the trigger.



- 16.** The lower pin at the bottom of the grip frame retains the magazine catch and its spring, and the upper pin is the stop pin for the magazine catch. Before removal, note the position of the

spring. The separate ends of the spring go toward the top, while the loop of the spring bears on the catch.

Reassembly Tips:



- 1.** Just as it is sometimes necessary to tap the barrel unit forward during disassembly, the barrel may need a tap toward the rear during reassembly to set the unit on the frame hook. To gauge whether the unit is in position, check the hole for the bolt stop pin at the rear to be sure that the unit is properly aligned with the frame.



2. After reinsertion of the bolt stop pin, be sure the hammer is in the fired position and tilt the pistol as shown to drop the hammer strut against the inside of the mainspring housing. This will insure that the strut seats against the mainspring plunger as the housing is swung back into the frame. If the housing is locked in place, but the bolt cannot be retracted, you will know that the strut has missed and you'll have to reopen the housing and try again. Although this operation is not difficult, it is the one point that often baffles those who take the Ruger apart for the first time.

The mainspring housing can be disassembled by drifting out the

takedown lever pin at the lower end of the housing, but this sequence has been intentionally omitted for two reasons. First, the mainspring is quite strong and has a ball bearing at its lower end, making reassembly extremely difficult. Second, the pins in the housing, retaining the lever and the bolt-stop pin at the top, are riveted in place at the factory, and are usually difficult to remove and replace. If disassembly for repair is necessary, it would be wise to return this unit to the factory.

Russian Tokarev

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Russian Tokarev also apply to the following guns:

Chinese M20

Hungarian M48

Yugoslav M57

Chinese Type 51

Norinco Type 54-1

Chinese Type 54

Sportsarms M213



Data: Russian Tokarev

Origin: U.S.S.R.

Manufacturer: Tula Arsenal

Cartridge: 7.62mm Tokarev

Magazine capacity: 8 rounds

Overall length: 7.68 inches

Height: 5¹/₄ inches

Barrel length: 4.57 inches

Weight: 29.4 ounces

The earliest Tokarev pistols had a removable plate in the backstrap of the frame for trigger removal. There have been three Chinese-made military versions of the pistol, and the one shown here is a Chinese Type 54. Hungary and Yugoslavia have also produced the Tokarev. More recently, there have been 9mm commercial Chinese pistols, marketed in the U.S. as the Norinco Type 54-1 and the Sportarms Model 213. These have an added manual safety. The instructions will apply for all of these.

Field Strip:



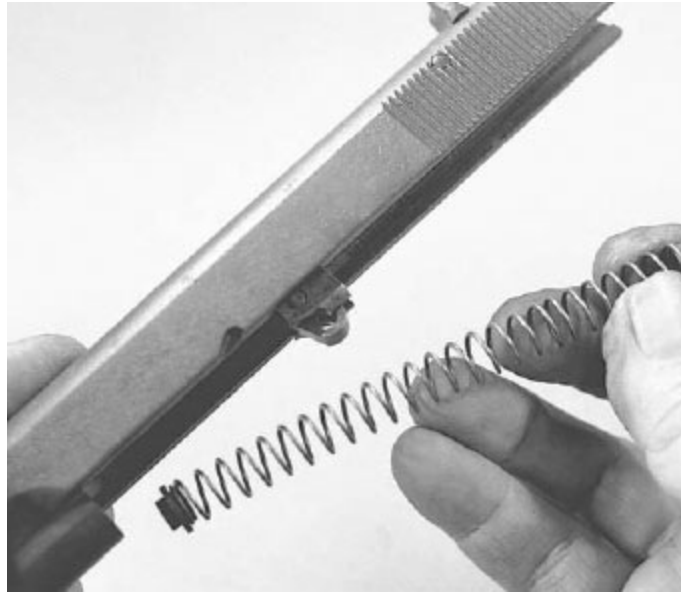
1. With the magazine removed, use a non-marring tool to exert rearward pressure on the rear flange of the spring retainer on the right side of the frame, snapping its forward arms off the tip of the slide-latch cross-shaft. Take care that the retainer does not strike the top of the grip panel.



2. Restrain the slide, and remove the slide-latch toward the left.



3. Remove the slide assembly toward the front. The recoil spring will tend to bow outward as it clears the frame, so keep a fingertip there to control it.



4. Slowly release the spring, and remove the recoil spring, guide, and front button from the underside of the slide.



5. Turn the barrel bushing to the position shown, and remove it toward the front.



6. Tip the barrel link over forward, and remove the barrel toward the front. If necessary, the link pin can be driven out to separate the link from the barrel. In normal takedown, leave it in place.

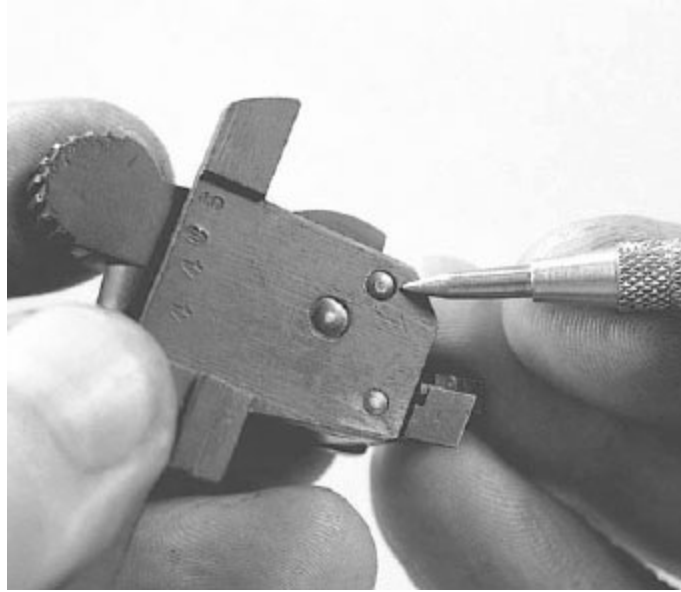


7. Lift the hammer assembly upward out of the frame. **Gun is now field-stripped.**

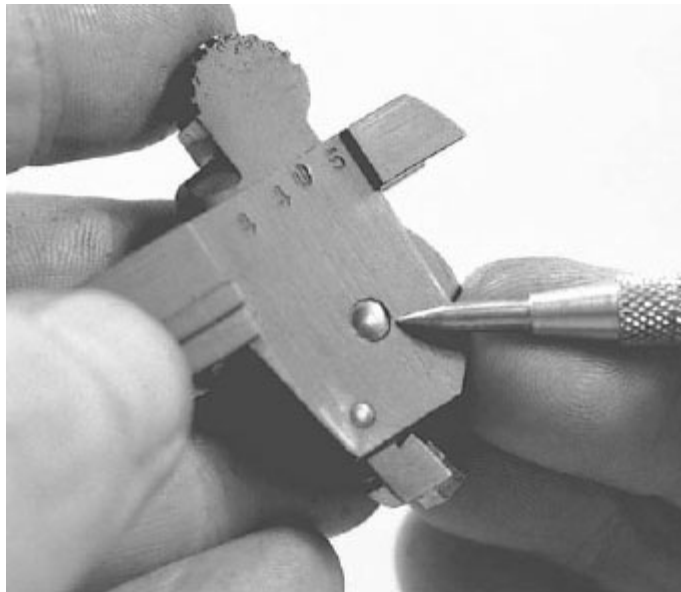


Russian Tokarev field-stripped

Detail Strip:



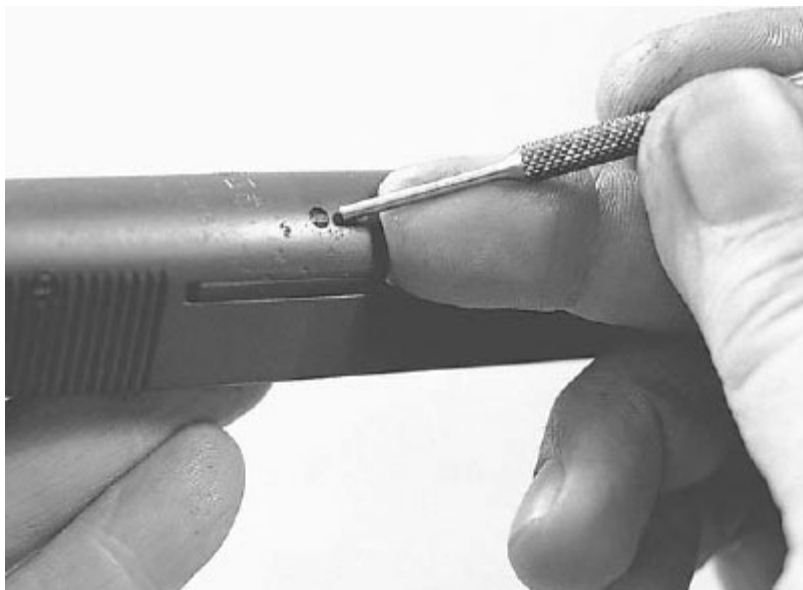
8. With the hammer in fired position, drifting out the cross-pin at the lower rear of the sub-frame will release the hammer spring for removal downward. **CAUTION:** *The spring is under tension, so control it.*



9. Drifting out the large pin at the center will allow removal of the hammer toward the rear.



- 10.** Drifting out the small cross-pin at the lower front of the sub-frame will release the sear and its attached spring and the disconnecter for removal downward. The flat sear spring is driven into a slot in the sear, and it is not removed in normal takedown.



- 11.** The extractor and its spring are retained on the right side of the slide by a vertical pin. This is driven out upward, and the extractor and spring are taken off toward the right.



- 12.** The firing pin and its spring are retained by a cross-pin which has a split and tempered end on the right side. For removal, it is necessary to make a tool with a V-cut in its end, to compress the split-pin for release. A nail of the proper diameter can be used for this. After the split head of the pin is unlocked, use a smaller drift to drive it out.



- 13.** Remove the firing pin and its spring toward the rear.



- 14.** Inside the left grip panel is a notched lever. Use a tool to move the lever toward the rear, and take off the left grip panel.



- 15.** Use a tool to turn the retaining plate inside the right grip panel, and remove the grip.



- 16.** To remove the magazine catch, a tool like the one used on the firing pin cross-pin is necessary. This one must be of slightly larger diameter, as shown. Once the split-end is unlocked, use a drift of smaller diameter to drive it out.



- 17.** The catch button and spring are removed toward the left.



18. The magazine catch is taken off toward the right.



- 19.** Move the trigger bar downward, and remove the trigger through the grip frame opening.
- 20.** Tip the trigger spring forward into the magazine well, and remove it upward.



- 21.** The slide-latch retainer can be removed by slightly spreading its spring arms, and taking it off the post upward. Take care to pry the arms only far enough to clear the post.

Reassembly Tips:



1. To start the split end of the magazine catch back into engagement, use slim pliers to compress the end, working through the grip frame opening.



2. If the sub-frame has been disassembled, be sure the sear, sear spring, and disconnecter are put back as shown.



3. When replacing the slide on the frame, hold the recoil spring as shown until it is covered by the frame.

Savage Model 1908

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Savage Model 1908 also apply to the following guns:

Savage Model 1915

Savage Model 1917



Data: Savage Model 1908

Origin: United States

Manufacturer: Savage, Utica, New York

Cartridge: 32 ACP, 380 ACP

Magazine capacity: 10 rounds

Overall length: 6¹/₂ inches

Height: 4³/₈ inches

Barrel length: 3³/₄ inches

Weight: 22 ounces

The model designation of the Savage 32 and 380 pistols has long been a debated point. Using the date of the definitive patent, some call the gun the Model 1907. Others use the 1905 patent date that appears on the pistol, or the year it appeared on the market in quantity, 1910. I have always thought the year it began production was appropriate, and have called it the Model 1908. A later pistol, the Model 1917, has a flared grip frame and a different spur on the striker lever. There was also a “hammerless” version in 1915. For all of these, the instructions will apply.

Field Strip:



1. With the magazine removed, use the manual safety to lock the slide in open position. Rotate the slide endpiece clockwise (rear view) one-quarter turn, until it is in the position shown.



- 2.** Slightly depress the cocking-lever, and remove the slide endpiece toward the rear.



- 3.** Restrain the slide, and turn the safety down to off-safe position. Keep the trigger depressed, and ease the slide off the frame toward the front. The barrel and recoil spring are now easily removed.

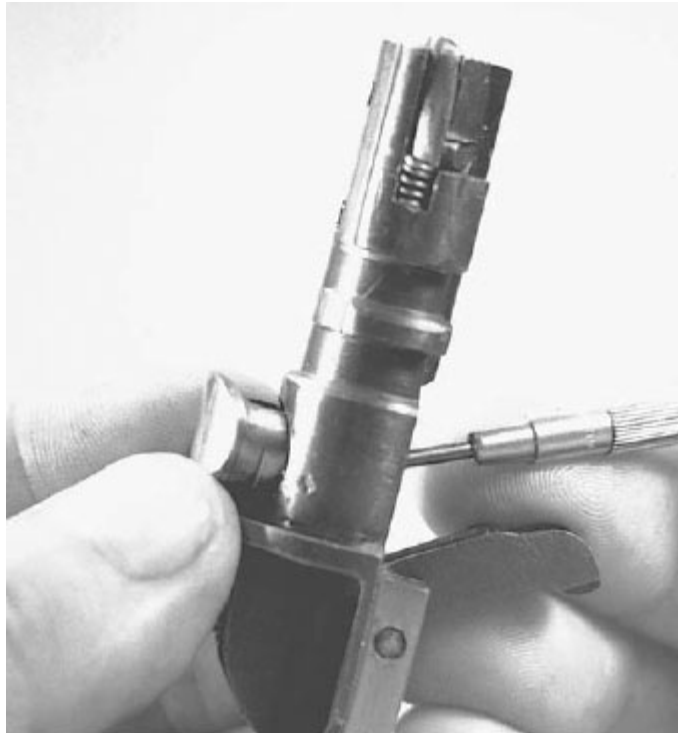


Savage Model 1908 field-stripped

Detail Strip:



4. If the barrel is equipped with a cartridge indicator, it can be removed by inserting a small tool under one spring-clip arm and gently forcing it off. However, this part is fragile, and is best left in place.

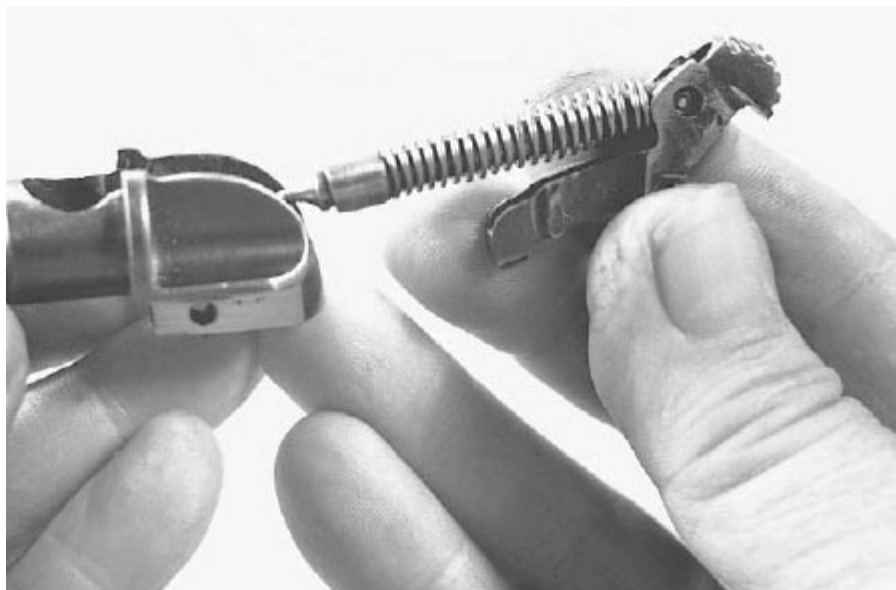


5. Restrain the cocking-lever, trip the sear, and gently lower the

cocking-lever to the fired position. Insert a tool to lift the mainspring retainer, pushing it upward, out of its well in the breechblock unit.



6. Drift out the striker lever cross-pin.



7. Turn the cocking-lever to the cocked position, and remove the lever assembly toward the rear.



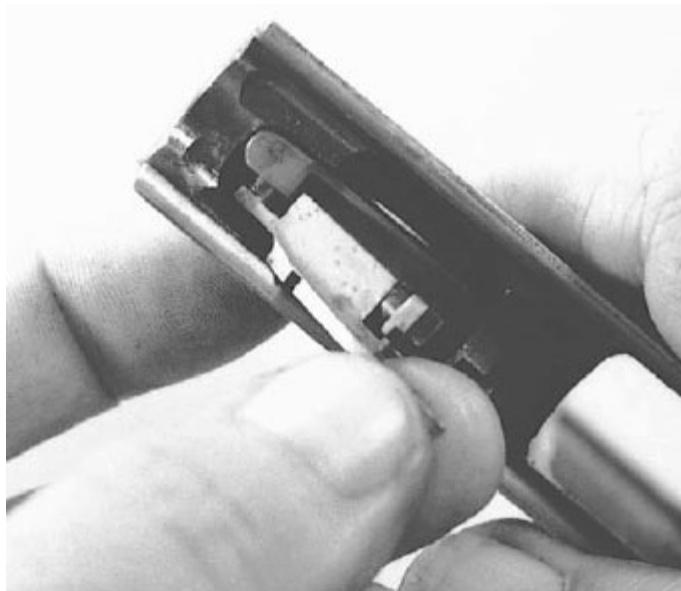
8. The striker and its spring can be separated from the lever by slightly compressing the spring and pushing out the cross-lever. **CAUTION:** *This is a strong spring, and it is under compression. The best method is to grip the lever in a padded vise, and grip the striker with padded Vise-Grip pliers, for better control.*



9. Move the sear rearward, then up for removal. Control the small coil sear spring, and remove it from its well in the breechblock.



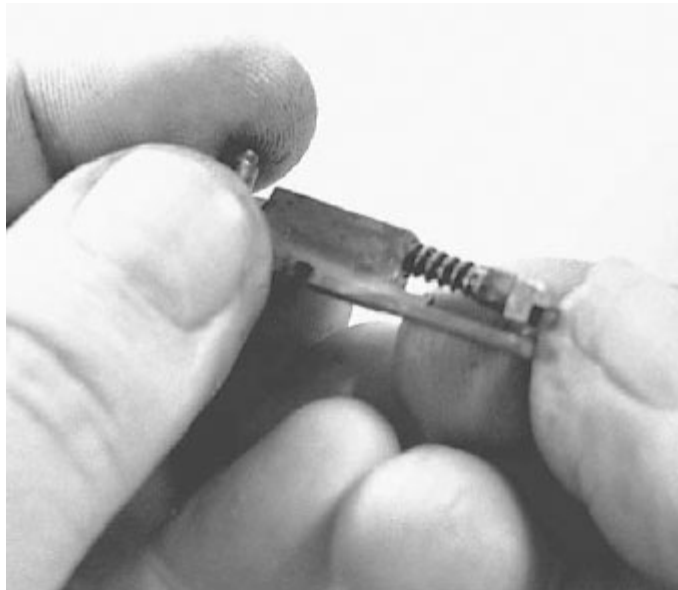
- 10.** Use a tool to retract the extractor spring, and remove the extractor toward the right. Control the spring, and ease it out for removal.



- 11.** Turn the trigger bar upward, and move it toward the left.



- 12.** Move the trigger forward, and remove the trigger and trigger bar upward. Remove the trigger spring from its well in the back of the trigger. The trigger bar is easily separated from the trigger.



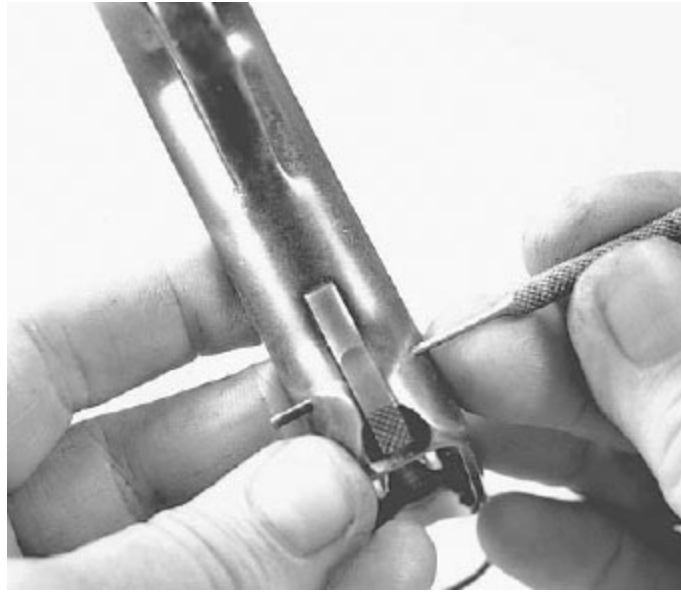
- 13.** Turn the disconnecter lock until its flange clears the slot in the trigger bar, and remove the lock piece, spring, and plunger from the trigger bar.



- 14.** If the pistol is equipped with a trigger-block safety, move the bar toward the right, then take it out upward.



- 15.** With the safety in the on-safe position, insert a fingertip to flex the center of the grip panel very slightly outward, and slide the panel off toward the rear. Original hard rubber grips are fragile, so take care. The other grip is removed in the same way.



16. Push out the cross-pin at the lower front of the grip frame.



17. Remove the magazine catch and its spring toward the front.



- 18.** Use a long small-diameter drift inside the frame to push the ejector out upward. The safety should be in the on-safe position. The positioning plunger and spring for the safety are housed in the base of the ejector—take care that they aren't lost.

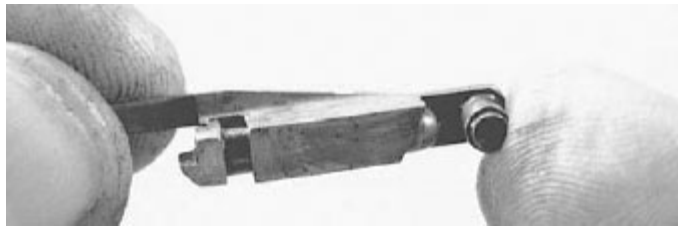


- 19.** Remove the manual safety toward the left.

Reassembly Tips:



- 1.** When replacing the ejector in the frame, use a non-marring tool, and be sure it is fully seated in the frame.



- 2.** The trigger bar unit is shown here, properly reassembled.



3. In pistols that have the trigger-block safety, the trigger bar is notched for the head of the safety bar. When the trigger bar is turned back down in reassembly, the notch must mate with the safety bar.



4. If you have removed the striker and its spring from the lever, be sure it is put back with the bevelled area near the firing pin on top, as shown.



5. With the striker lever in the fired position, insert a tool to push the spring slightly forward as the spring retainer is moved into place.

Seecamp



Data: Seecamp

Origin: United States

Manufacturer: L. W. Seecamp Company,
Milford, Connecticut

Cartridge: 32 Auto

Magazine 6 rounds
capacity:

Overall 4.18 inches
length:

Height: 3.12 inches

Barrel length: 2.06 inches

Cartridge: 11.5 ounces

Field Strip:

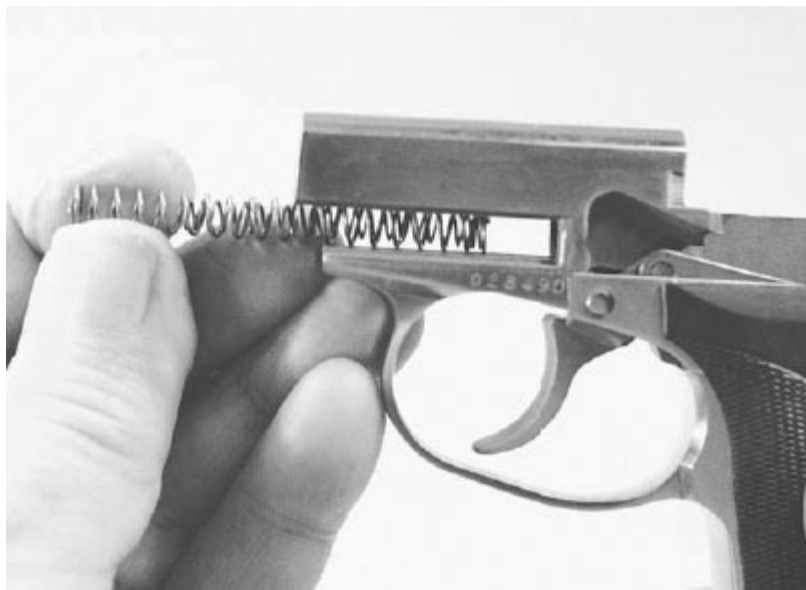
Larry Seecamp's elegant little pistol was designed to use the Winchester Silvertip hollow-point cartridge. The 32 version was introduced in 1985. Earlier, from 1981 to 1985, a 25 Auto version was made. Recently, a 380 chambering was added. There are some very nice copies by other makers, but those are mechanically different. And, for those who own the hand-made Seecamp, the name does matter.



1. The magazine must be left in place, as the magazine safety will limit slide movement. Parking an empty .32 Auto cartridge case between the barrel and slide will exactly position the slide for access to the takedown latch. Insert a small tool in the opening and depress the latch, then lift the slide at the rear.



2. As the slide is lifted and slightly retracted, the cartridge case will fall away. Move the slide off toward the front.



3. Remove the two concentric recoil springs. Remove the magazine.



Seecamp field-stripped

Detail Strip:



- 4.** The extractor and its coil spring are retained in the slide by a vertical pin. Drift it out upward. Control the extractor and spring.



5. The circular firing pin retainer is staked in place, and removal should be done only for repair. If this is necessary, insert a drift to depress the firing pin, and tap the drift on its side to nudge the retainer out downward. **CAUTION:** *The firing pin and its rebound spring will be released as the retainer clears, so control them.*



6. Remove the screw, and take off the grip panels. Remove the sideplate.



7. Tip the trigger bar slightly outward at the rear, and turn it upward. Detach it from the spring, and remove it.



8. Turn the spring over forward, and lift it off its post on the magazine safety.



9. Remove the magazine safety.



10. Remove the trigger.



- 11.** Restrain the magazine catch, and drift out the catch cross-pin.
CAUTION: *The combination catch and hammer spring will be released, so keep the parts under control.*



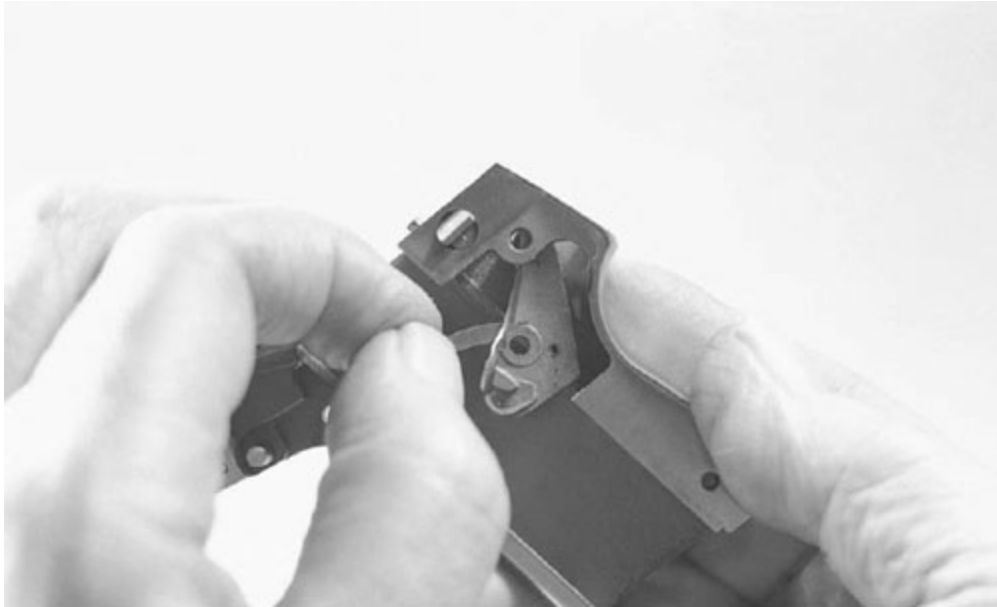
- 12.** Ease out the magazine catch, and remove it.



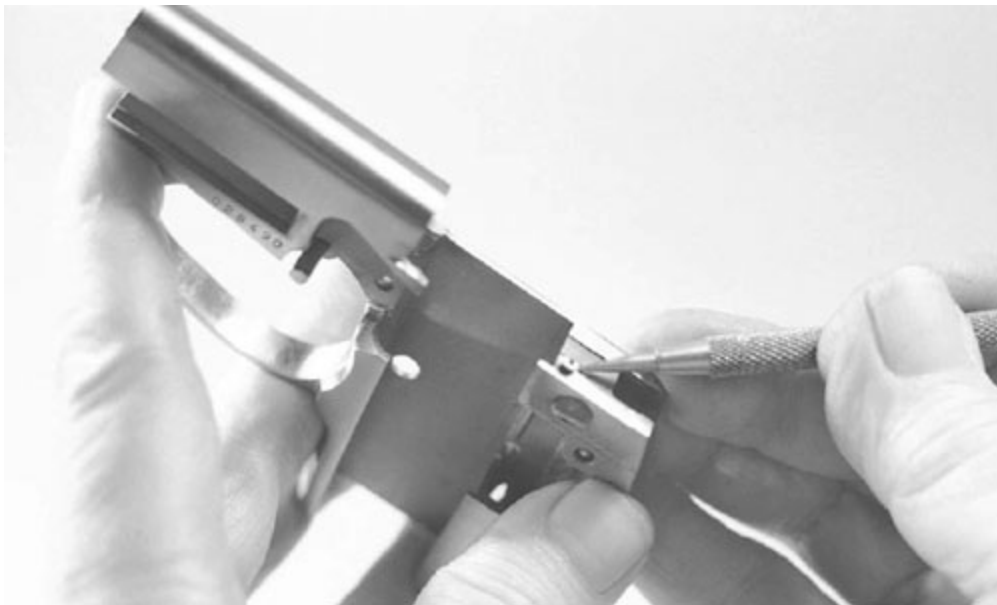
13. Remove the spring and its plunger.



14. Remove the hammer pivot pin.



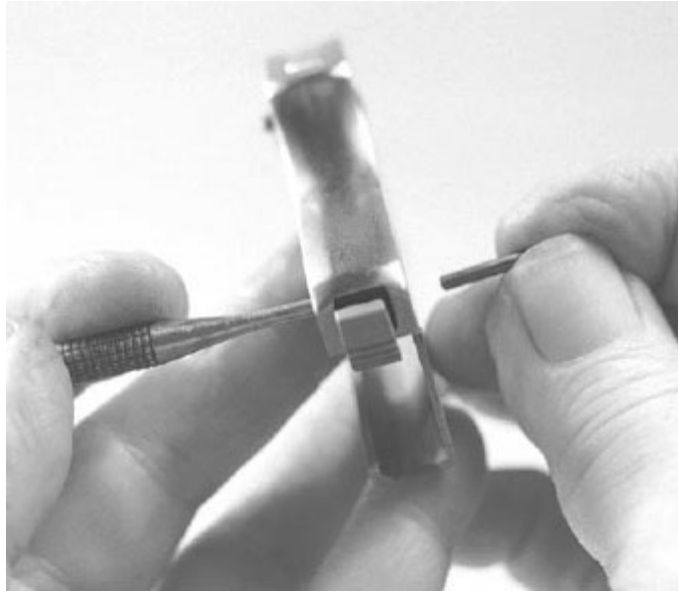
15. Turn the hammer strut into the magazine well, and remove the hammer downward and forward. If necessary, drifting out the roll-pin in the hammer will free the strut for removal.



16. The takedown latch, its coil spring, and a very small slide-bearing-ball can be removed by drifting out this roll-pin (which

is also the ejector). However, this should be done only for repair.

Reassembly Tips:



1. Insert a drift of the proper size to hold the magazine catch in position for driving in the pin.



2. The parts are shown here in proper order before the side-plate is

re-installed.



- 3.** As the slide is re-installed, the cartridge case can again be used to position it. Pull the trigger slightly to tip the hammer out of the way as the slide is moved downward.

SIG/Sauer Mosquito



Data: SIG/Sauer Mosquito

Origin: Germany

Manufacturer: J.P. Sauer & Sohn GmbH,
Eckernförde

Cartridge: .22 Long Rifle

Magazine 10 rounds
capacity:

Overall length: 8.3 inches

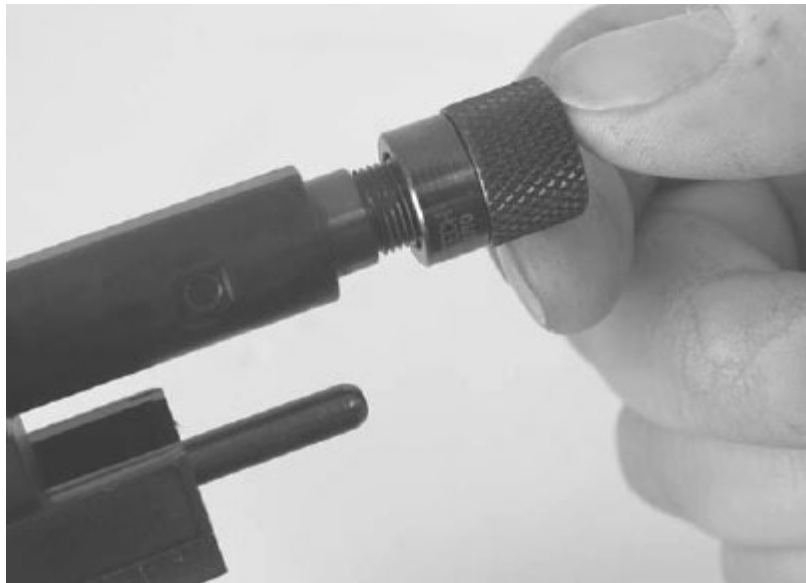
Height: 5.3 inches

Barrel length: 4.9 inches

Cartridge: 27.8 ounces

The SIG/Sauer Mosquito is a reduced size version of the full size models manufactured by that company. It is a .22 LR chambered package of fun and is available in several different styles, from standard black, to two-tone, to alternate colors, and even camouflage. Like many rimfire auto pistols, it uses an aluminum slide with a steel slide insert that serves as a breech block.

Field Strip:



- 1.** Remove the thread protector, if such a device is present.



2. With the magazine out, the hammer cocked, and the slide closed, rotate the takedown lever 180 degrees until it faces forward.



3. Pull the slide all the way to the rear and lift up the back end.



4. Remove the slide from the frame by pulling it off the barrel and over the muzzle. Control the recoil spring as the slide comes off the frame. The guide rod is loose and can also be removed at this time.



SIG/Sauer Mosquito field stripped

Detail Strip:



5. Remove the screw retaining the left side safety lever.



6. Pull the lever off slowly as the detent ball bearing and spring reside in the lever itself and should be controlled.



7. Push out the slide breech block pin (safety) to the right. If necessary the right side safety lever can also be removed by removing its screw.



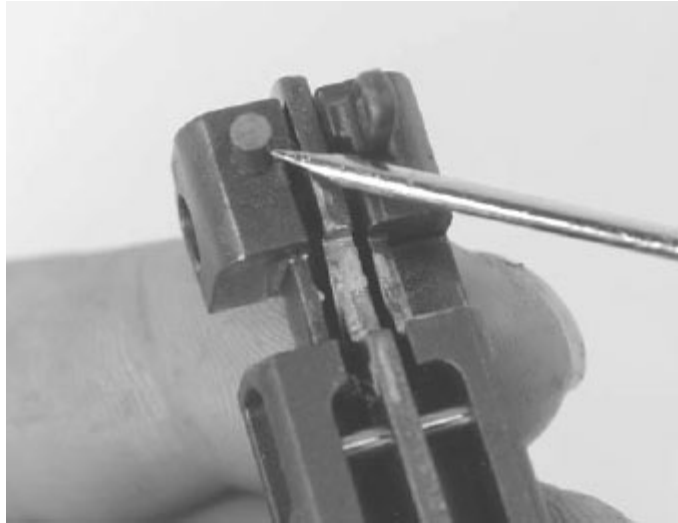
8. Unscrew, by turning counterclockwise, the rear sight adjustment screw until the rear sight stops moving. Then manually pull the rear sight slightly further to the right to disengage the screw from its threads. The breech block will be released. The rear sight can be fully removed by then pushing the sight assembly all the way out to the right.



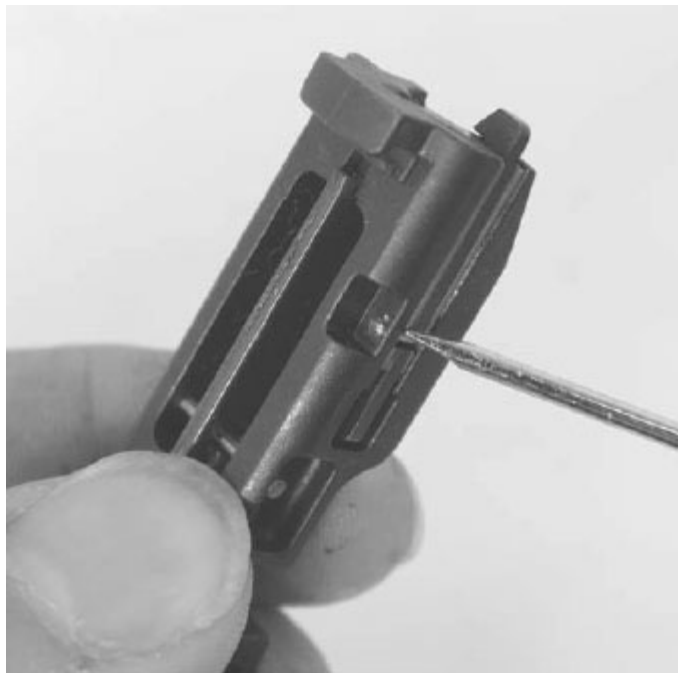
9. Rotate the breech block down and slightly forward to unhook it from the front of the ejection port.



- 10.** Removing the breech block will free the firing pin safety lock and spring, which can simply be lifted off the block.



- 11.** This is the breech block pin and spring, which function as the detent for the rear sight adjustment screw. These can be lifted from the breech block.



- 12.** Drive out this pin from the top to the bottom to free the extractor and spring, and the two extractor guides.



- 13.** Drive out this pin from right to left to free the firing pin and firing pin spring.



14. Unscrew and remove the takedown lever screw.



15. Push out the takedown lever to the left.



16. Unscrew and remove this barrel retention screw.



17. Lift the barrel up and out of the frame.



- 18.** The locking block can now be pulled from the barrel, or if left in the frame, lifted from the frame.



- 19.** The round, silver takedown lever insert can now be removed.



20. Remove the right side grip panel by removing the two grip screws.



- 21.** Press the magazine catch and lift the magazine catch retainer from the right side of the frame. It articulates with the catch and can be separated from the catch.



- 22.** Push the catch out of either side and pull the catch spring from the catch.



23. Remove the left side grip panel by removing the two grip screws.



24. Remove the decocking lever spring.



25. Remove the decocking lever.



26. Drive out the trigger pin.



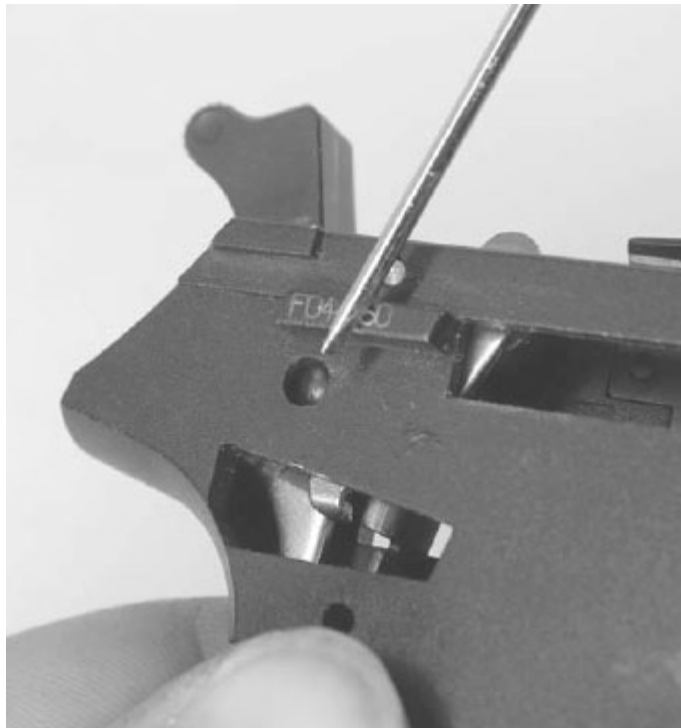
27. Pull the action casing from the frame. **Note:** *The hammer is under spring tension and the spring is attempting to push the two halves of the action casing apart.*



28. The trigger bar and trigger bar spring can now be removed.



29. Remove the slide stop and the small slide stop spring behind it.



- 30.** Push the hammer pin in until it is well below flush with the right side action casing surface, but not all the way out.



- 31.** Lift the right side of the action casing off the left side while holding the hammer spring and strut against the left side of the casing. The hammer return spring will likely spring free at this time, so control it. The trigger will also be free to fall out of the action casing.



- 32.** The centering ball at the bottom of the hammer spring should be released in a controlled fashion to release hammer spring tension.



- 33.** Lift the firing pin safety from its pin and then remove the pin from the left side casing.



- 34.** Remove the sear.



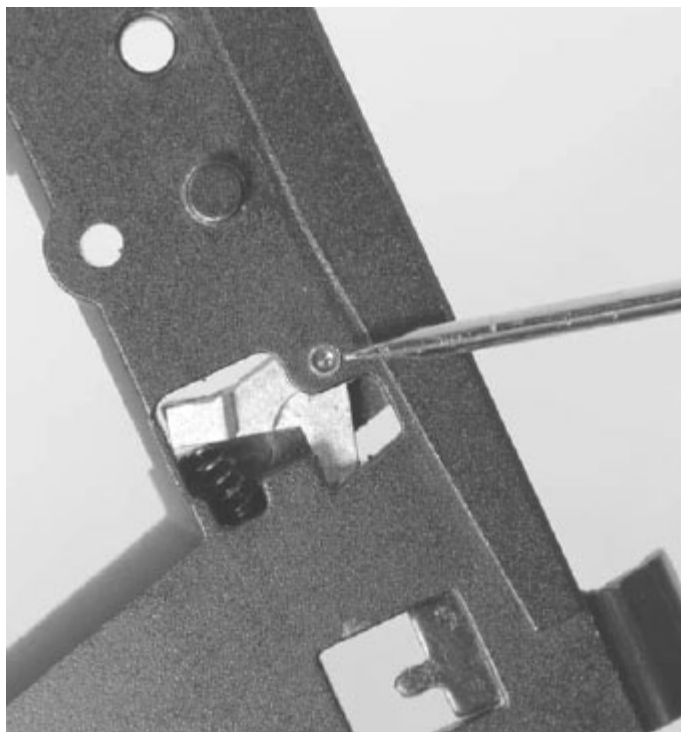
- 35.** The hammer pin can be pushed all the way out and the hammer lifted from the action casing. There are thin bushings on both sides of the hammer, so do not lose them.



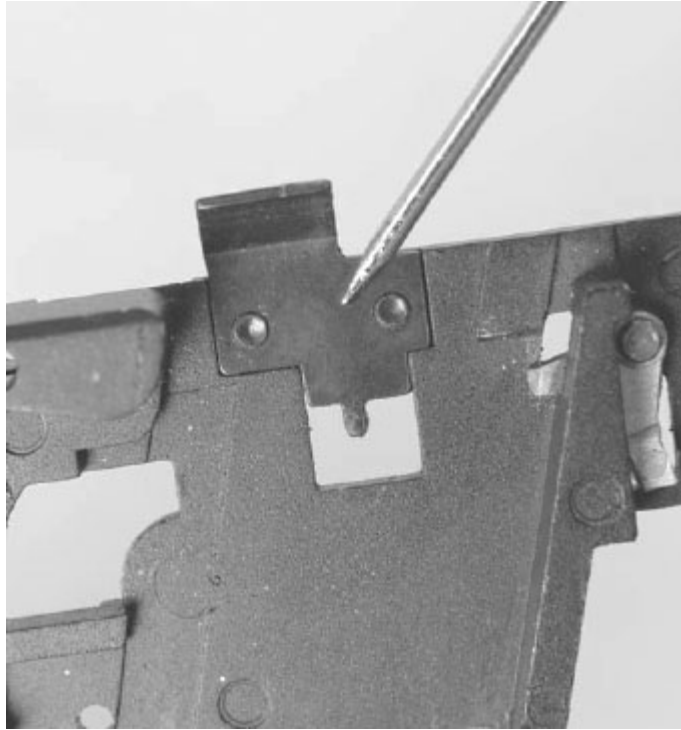
- 36.** The hammer strut assembly is composed of the centering ball, the strut, the hammer spring, and two washers.



37. The hammer strut pin is splined and should not be removed unless it needs to be replaced.



- 38.** The magazine safety is staked in and should not be removed unless it needs to be replaced.

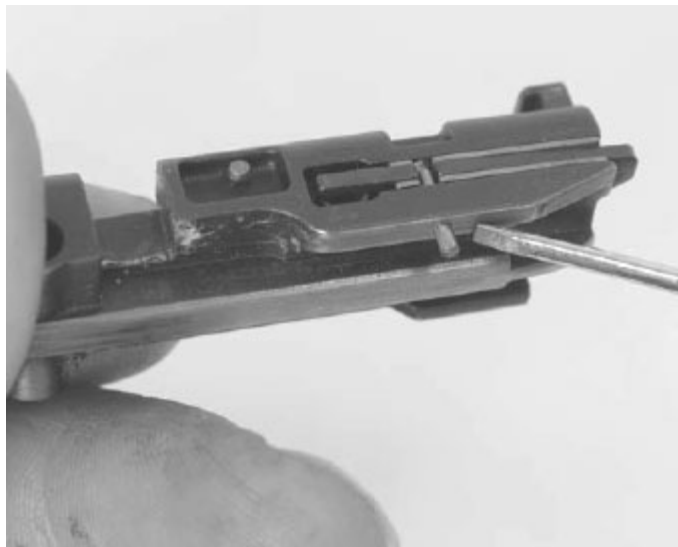


- 39.** The ejector is staked in and should not be removed unless it needs to be replaced.



- 40.** The internal lock, composed of the lock and spring, can be removed from the tube at the back of the frame.

Reassembly Tips:



- 1.** The extractor pin is splined on one end and should be reinserted from the bottom of the slide, with the spline toward the bottom.



2. When replacing the takedown lever insert in the barrel, the square hole should be facing to the left. The slots should be facing the front. The insert should be oriented so that when the lever is reinstalled after the barrel is seated, the lever would be pointing forward.



- 3.** The takedown lever screw should not be strongly tightened, or it will prevent the lever from moving. It may be necessary to apply a small amount of thread locker on the screw to enable the installation to be less than tight, yet prevent the screw from backing out from vibration.

SIG/Sauer P-225 (P6)



Data: SIG/Sauer P-225 (P6)

Origin: West Germany

Manufacturer: J.P. Sauer & Sohn GmbH
Ekernforde

Cartridge: 9mm Luger

Magazine 8 rounds
capacity:

Overall length: 7 3/32 inches

Height: 5 1/8 inches

Barrel length: 3 13/16 inches

Cartridge: 28.7 ounces

The P-225 is essentially a shortened version of the Model P-220, the gun that was marketed at one time as the Browning BDA. However, there are several important differences, and all of the mechanical features are not exactly the same. For example, the magazine catch of the P-225 is a push-button type in a different location. One of several guns developed for West German Police use, the P-225 is also known as the P6.

Field Strip:



1. Lock the slide open and remove the magazine. Turn the takedown lever down to the vertical position.



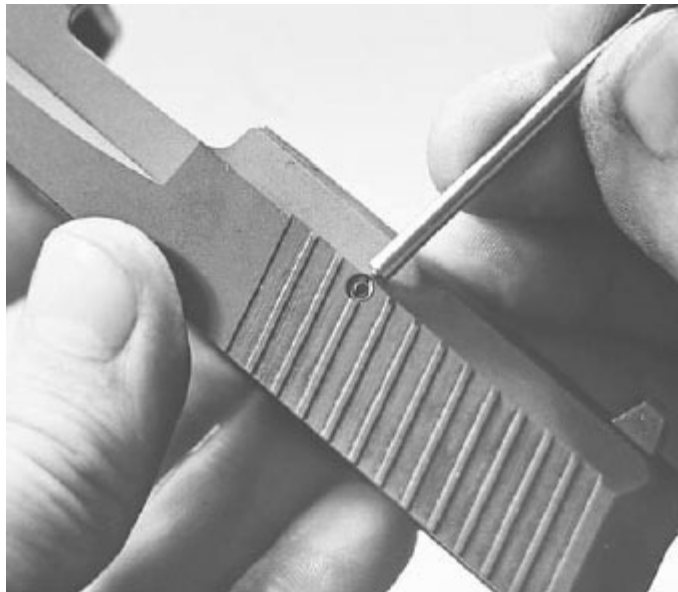
2. Restrain the slide against the recoil spring tension, trip the slide latch, and move the slide assembly forward off the frame.



3. Lift the rear of the recoil spring guide away from the barrel, controlling the spring tension, and remove the spring and guide toward the rear. **CAUTION:** *This is a powerful spring. Don't let it get away.*



4. Move the barrel slightly forward, then remove it downward and toward the rear.



5. The breechblock is retained in the slide by a concentric double roll pin. Drifting out this pin will allow removal of the breechblock downward. The extractor is easily removed from the right side, and depressing the firing pin safety block upward will release the firing pin and its spring for removal toward the rear. When the firing pin is out, the safety block is released downward,

along with its spring.



6. Turn the takedown lever until it points toward the front of the frame, and remove it toward the left.



7. Removal of the takedown lever will release the locking insert. Move the insert upward and toward the front for removal. The attached slide latch spring will come out with the insert, and is easily detached toward the left.



8. Remove the grip screws. If the lock washers are loose, take care that they aren't lost. The right grip can simply be lifted off, but the left one must be lifted slightly at its lower edge, then moved off toward the rear, to clear the decocking lever.



9. Flex the rear tip of the combination trigger and trigger bar spring

downward out of its slot in the trigger bar, and take the spring off toward the right.



- 10.** Move the trigger pivot pin toward the right, just enough to clear the slide latch, and remove the slide latch upward.



- 11.** Remove the trigger pivot pin toward the right.



- 12.** Move the trigger back against the rear interior of the guard, then move it forward and upward. At the same time, exert slight inward pressure on the trigger bar, until it moves into the magazine well. Do not use extreme pressure.



- 13.** Remove the trigger and the attached trigger bar from the top of the frame. The bar is easily separated from the trigger.



- 14.** Place the top of the frame (but not the hammer) against a firm surface, and use a screwdriver to exert pressure on the underside of the hammer spring base, lifting it out of its slots in the grip frame, and moving its lower end toward the rear.



- 15.** Remove the hammer spring assembly downward. The spring,

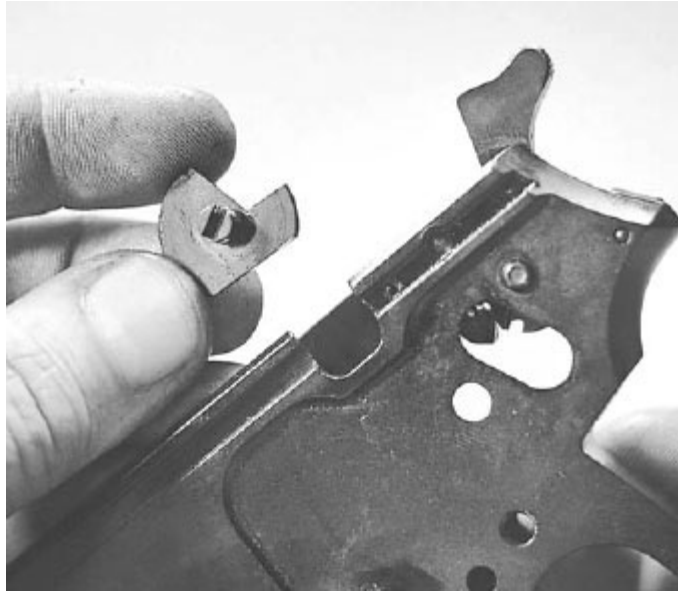
hammer strut, and spring base can be separated by drifting out the retaining cross-pin, if necessary. **CAUTION:** *This is a strong spring, so take care and control it.*



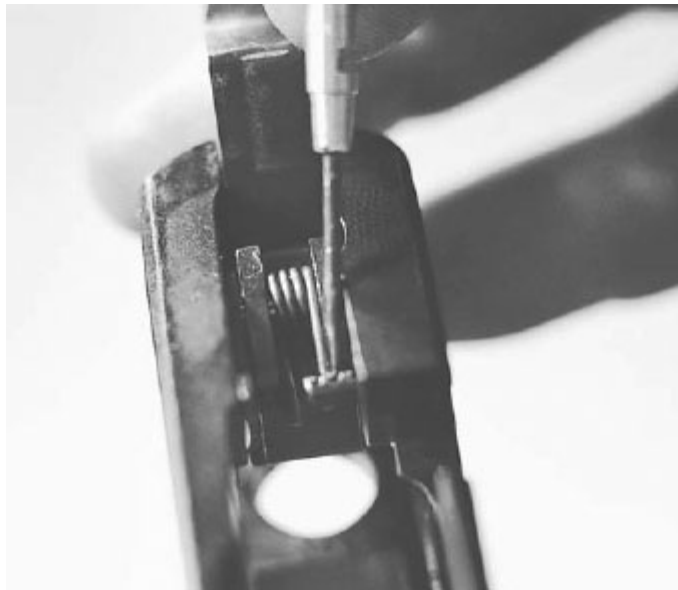
16. Unhook the decocking lever spring at the rear, swing it forward, and remove it toward the left. The decocking lever post will be released at this point, and may drop inward, or may stay in place.



17. Remove the decocking lever toward the left.



18. Push the decocking lever post inward, and remove the post and its attached plate from inside the frame.



19. Depress the upper arm of the sear spring and move it toward the right until it clears its bearing pin, then ease it upward, relieving the spring tension.



- 20.** Push the sear cross-pin toward the left, just far enough to clear the firing pin block lever. Move the lever forward, then take it out upward.



- 21.** Remove the sear cross-pin, and take out the sear spring upward. Move the sear downward, then out the opening on the right side of the frame.



- 22.** Push out the hammer pivot pin, and remove the hammer from the top of the frame.



- 23.** Drifting out the small cross-pin at the upper rear of the frame will allow removal of the hammer stop piece, and will also release the hammer rebound spring mounted in its center. *Note the position of the spring before the pin is removed, to aid reassembly, and restrain the spring during removal.*

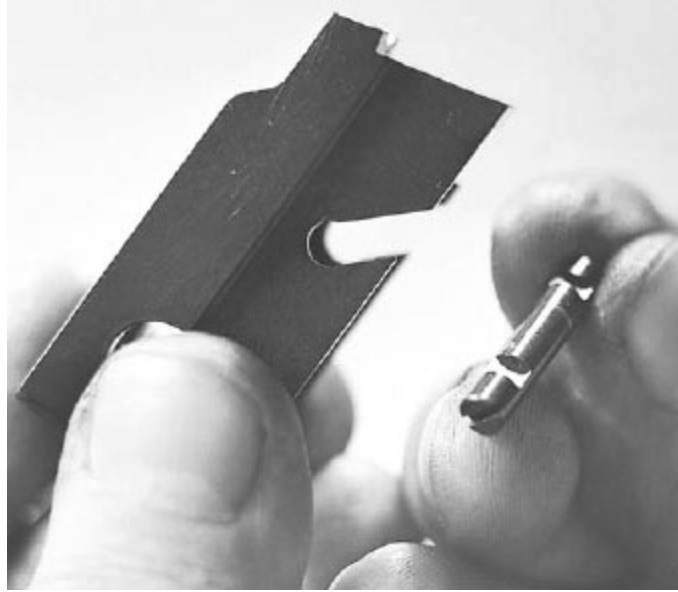


- 24.** Use a very small tool to depress the magazine catch-retaining pin, located in the front face of the catch button next to the frame.



- 25.** Remove the magazine catch assembly toward the left, and take care not to lose the magazine catch spring, retaining pin, and its spring.

Reassembly Tips:



1. Note that there are two recesses in the trigger cross-pin, and these must be mated with the slanted slots in the locking insert.



2. When the trigger cross-pin is installed in the frame, the two recesses must be oriented to the underside, angled slightly toward the front. A screw-slot is provided in the left end of the pin to aid adjustment. The locking insert should slip easily into place when the pin is properly positioned. No force is required.



- 3.** Insert the takedown lever in the vertical position, then turn it to point forward and push it into the frame. Remember to turn it back down into takedown position before replacing the slide assembly on the frame.

SIG/Sauer P230

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the SIG/Sauer P230 also apply to the following gun:

SIG/Sauer P232

Data: SIG/Sauer P230

Origin: West Germany

Manufacturer: J. P. Sauer & Sohn,
Eckernförde

Cartridge: 380 ACP

Magazine 7 rounds
capacity:

Overall length: $6\frac{9}{16}$ inches

Height: $4\frac{11}{16}$ inches

Barrel length: $3\frac{5}{8}$ inches

Cartridge: $16\frac{1}{4}$ ounces



As its name indicates, the SIG/Sauer P230 is the result of a collaboration between the Schweizerische Industrie Gesellschaft (SIG) of Switzerland and the J. P. Sauer company of Germany. Because of current Swiss rules on arms export, the pistols are made by Sauer in West Germany. A simple and elegant design, the P230 has one feature that is reminiscent of the Sauer 38H—a lever on the left side which lowers the hammer. It also has an automatic firing pin block which is cleared only when the trigger is fully to the rear. The pistol was recently re-designed to become the P232, but there were no major mechanical changes.

Field Strip:



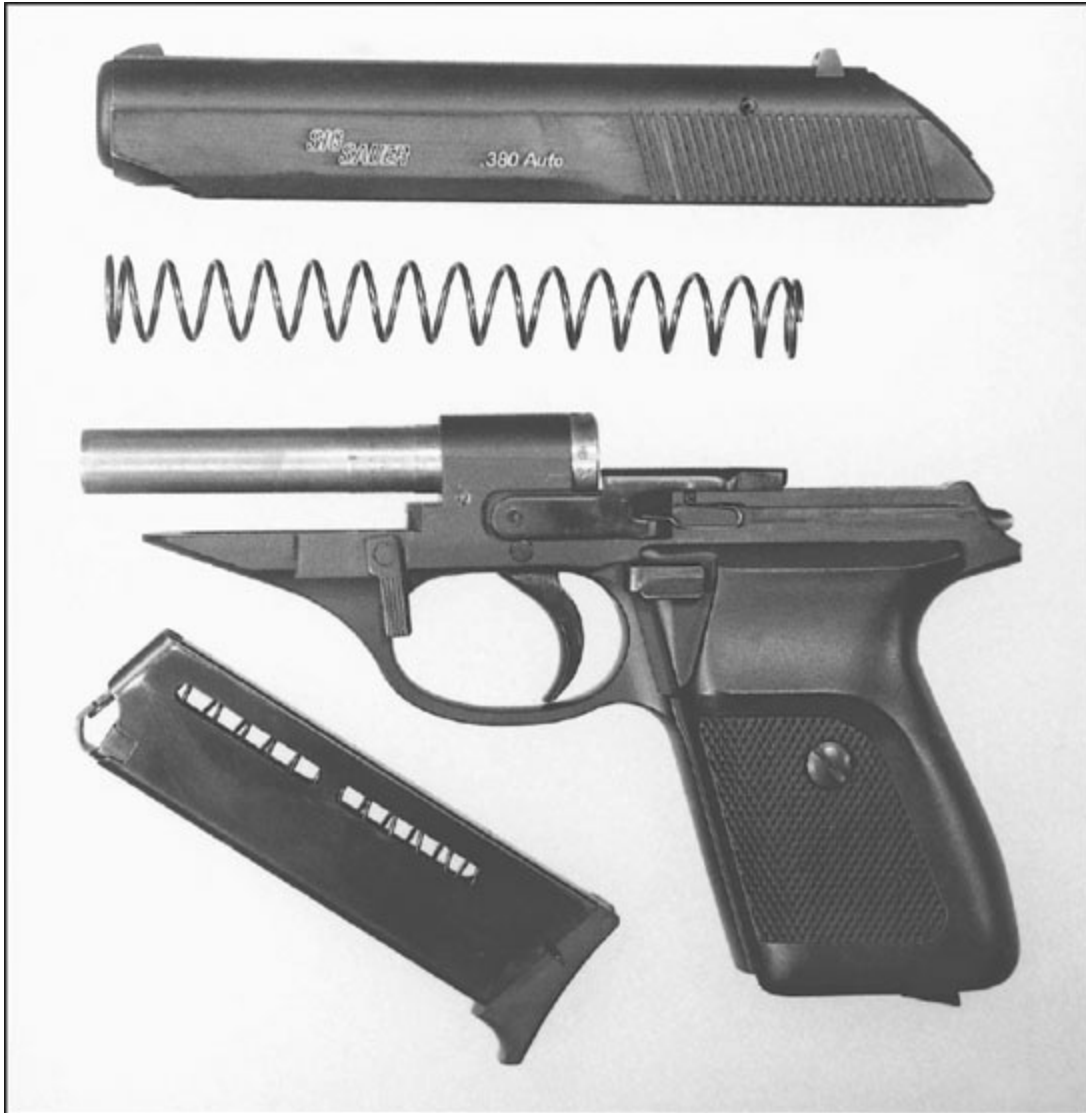
1. The takedown-latch is located on the left side of the frame, just forward of the trigger. Remove the magazine, and cock the hammer. Turn the takedown-latch down to vertical position.



- 2.** Pull the slide all the way back and lift it at the rear to release it from the slide tracks on the frame.



3. Lift the rear of the slide enough to clear the breech face over the barrel, and ease the slide forward off the barrel and frame. Remove the recoil spring from the barrel. **Gun is now field-stripped.**



SIG/Sauer P230 field-stripped

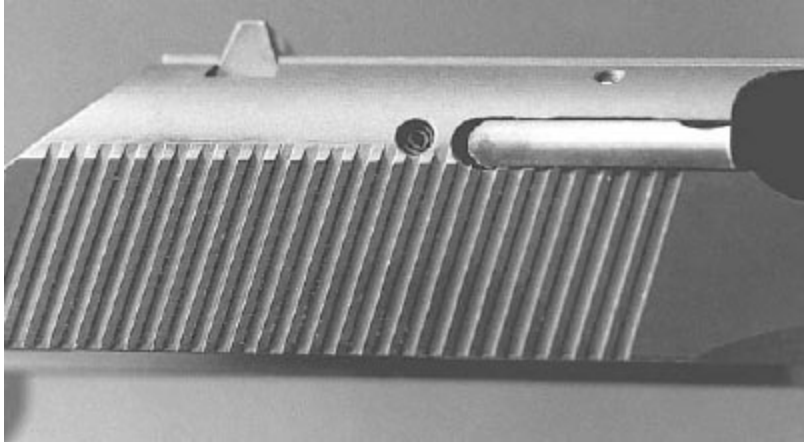
Detail Strip:



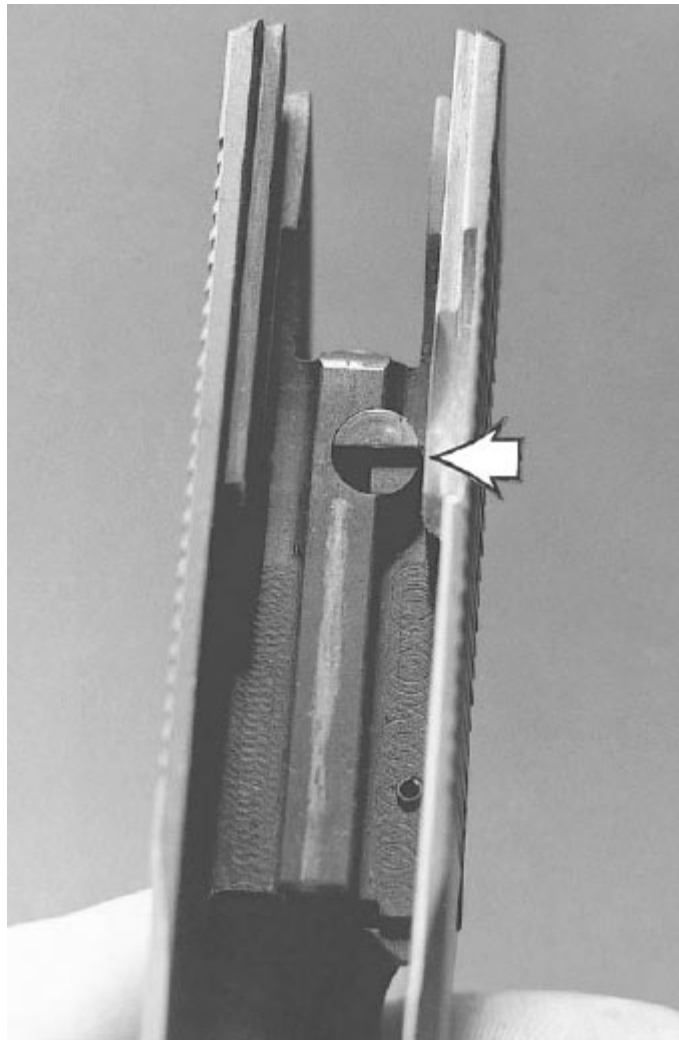
4. Lift the lower arm of the ejector/hold-open spring from its recess on the part and remove the spring from its recess in the left side of the frame.



5. Remove the ejector/hold-open from the left side of the frame.

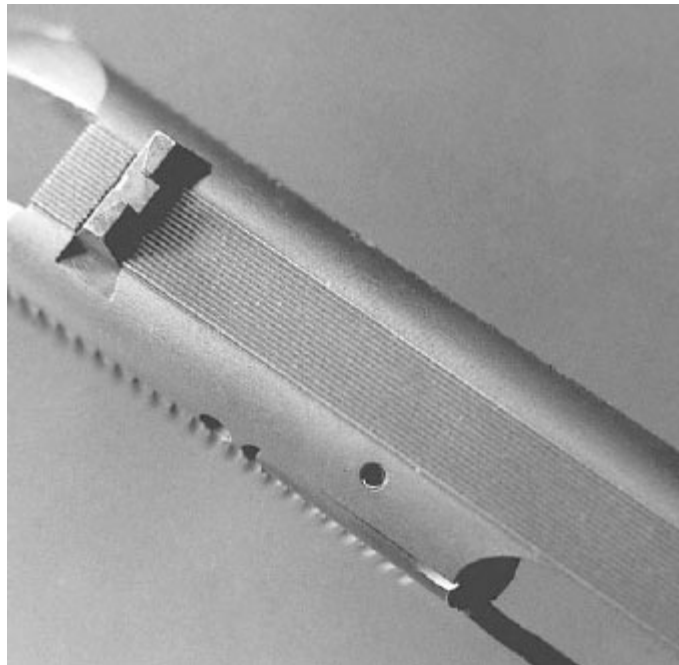


6. A horizontal roll pin retains the firing pin and its spring.

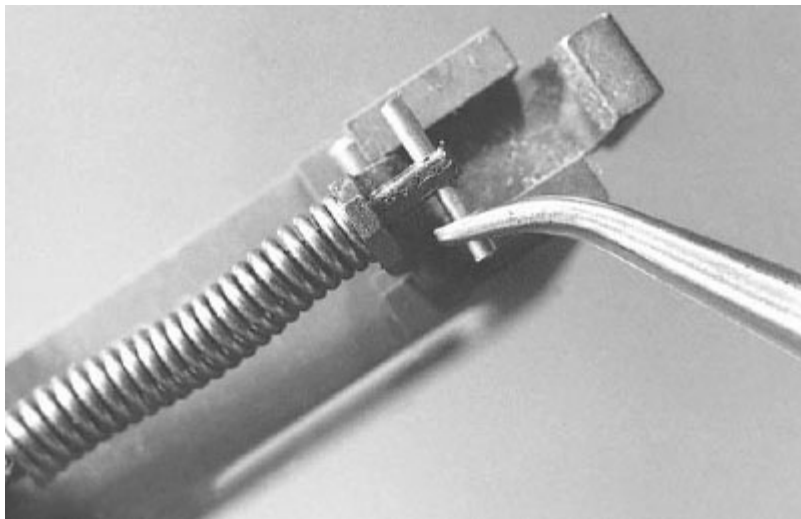


7. Removal of the cross-pin will also release the firing pin block

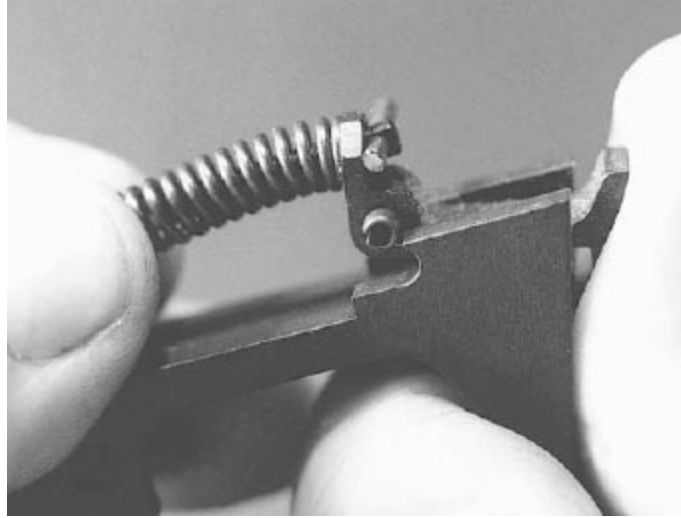
(arrow) and its spring for removal from the underside of the slide.



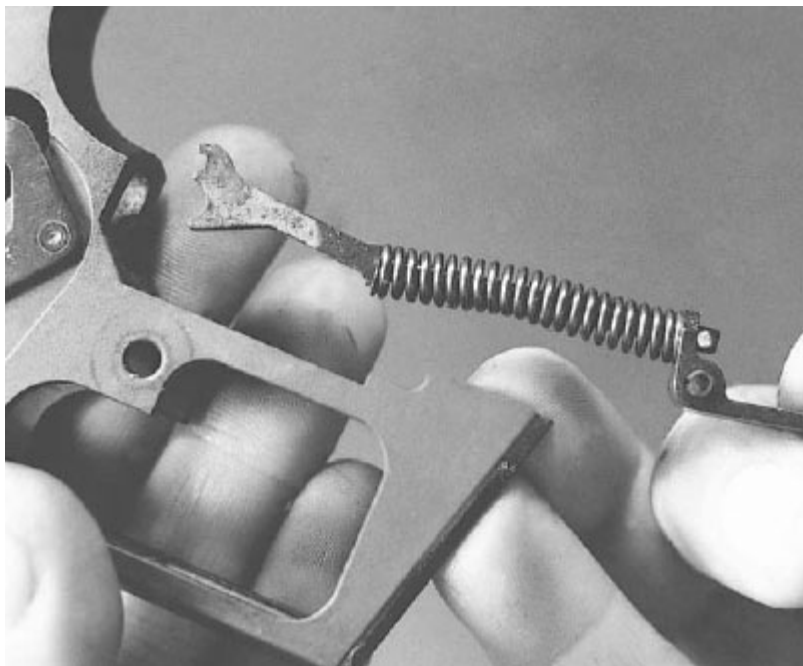
8. The extractor and its spring are retained by a vertical roll pin.



9. After the grips are removed, cock the hammer and insert a keeper pin through the hole in the lower end of the hammer strut. Ease the hammer down and the hammer spring will be trapped on the strut.



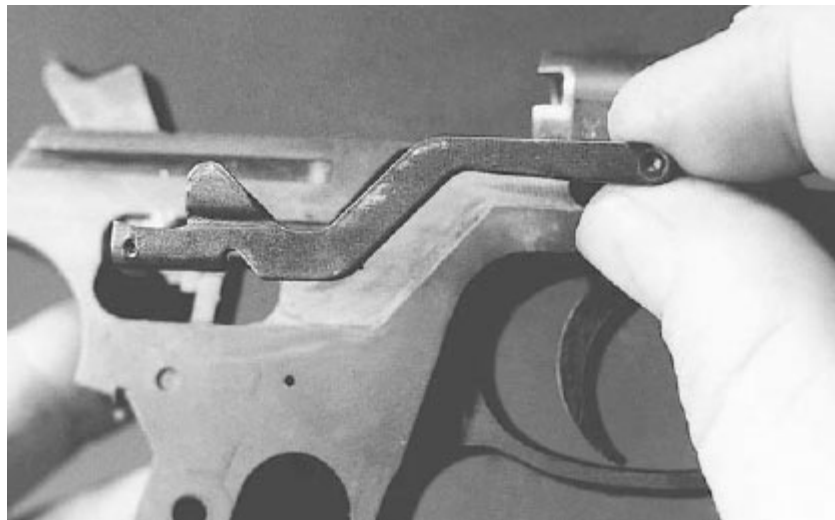
- 10.** Push the magazine catch upward and tip it toward the rear to free its cross-pin from the backstrap.



- 11.** Remove the magazine catch, hammer spring, and hammer strut from the rear of the frame. Compressing the spring and taking out the keeper pin will free the strut and spring for removal.
CAUTION: *The spring is under tension—remove carefully.*



- 12.** The combination spring which powers the trigger and trigger bar is easily detached from its holes in the bar and the frame and can be lifted off toward the right.



- 13.** The trigger bar can now be lifted off toward the right.



- 14.** The cross-pin which retains the trigger must be drifted out from right to left. A roll pin retains the barrel, and after its removal the barrel can be driven out toward the rear. Barrel removal is not advisable unless replacement is required.



- 15.** The takedown-latch lever can be pushed out to the left and removed from the frame. **CAUTION:** *Removal of the lever will release the takedown block and its spring and plunger, and the spring is under tension. Restrain the block while taking out the lever, then*

release it slowly.

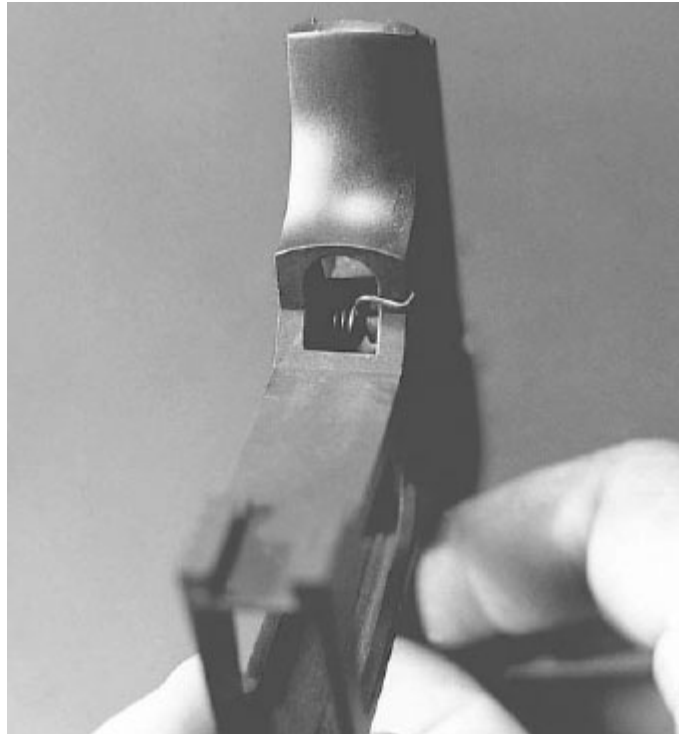


- 16.** The dedocking lever spring is easily detached from its holes in the lever and the frame, and can be lifted off toward the left.



- 17.** The cross-shaft of the decocking-lever is also the sear pivot, and retains the sear and its spring. These parts will be released as the dedocking-lever is pushed out toward the left and removed. The large cross-pin in the upper rear of the frame retains the hammer,

and can be pushed out toward either side.



- 18.** Before removal of the decocking-lever, sear, and sear spring, note the position of the sear spring, and its right arm which hooks under the frame edge on the right.

Reassembly Tips:

When replacing the sear and sear spring in the frame, a slave pin can be used to hold them in place while inserting the decocking-lever. The same procedure can be used when replacing the takedown block and its lever.

if the hammer strut, hammer spring, and magazine catch have been separated, it may be necessary to grip the upper part of the strut in a vise while compressing the spring with the magazine catch and inserting the keeper pin.

A slave pin can be used to hold the firing pin and its block in place

for re-insertion of the cross-pin, but be sure to use a pin nearly the size of the hole, or the parts can be damaged.

SIG/Sauer P290



Data: SIG/Sauer P290

Origin: United States

Manufacturer: SIG/Sauer, Exeter, NH

Cartridge: 9mm Parabellum

Magazine capacity: 6 rounds

Overall length: 5.5 inches

Height: 3.9 inches

Barrel length: 2.9 inches

Cartridge: 20.5 ounces

The SIG/Sauer is one of the smallest handguns manufactured by the SIG group of companies. This particular model is manufactured domestically and can be purchased in a variety of finishes, with or without a mini-laser on the trigger guard. The sub-compact 9mm market continues to expand due to the increase in carry permits held. The P290 differs from most SIG pistols in the lack of a decocking mechanism, relying on the now common paradigm which requires the slide to cycle in order for the trigger to reset, while still being a double action only handgun. Furthermore, the slide stop also serves as the takedown device.

Field Strip:



1. With the magazine out of the gun, align the slidestop notch with the tab on the slide stop.



2. Push the slide stop out to the left.



3. Pull the slide off the front of the frame.



4. Remove the recoil spring assembly by lifting the back end. The dual recoil springs are not captive, so control the assembly when removing it.

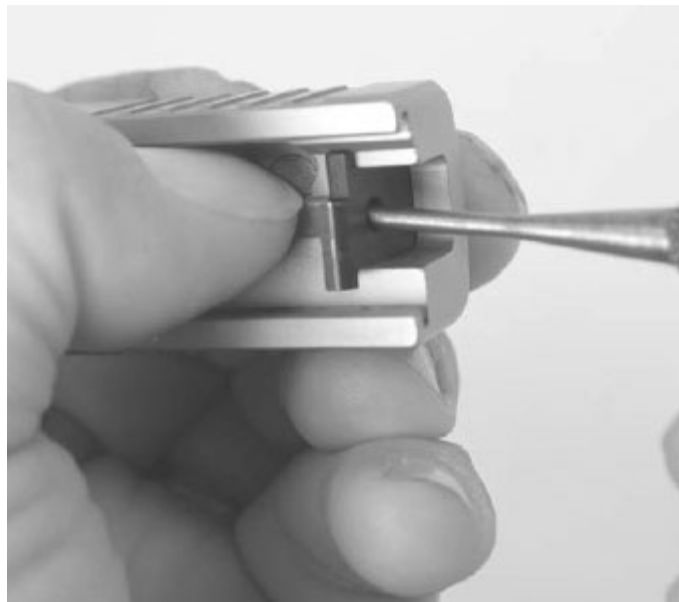


5. Lift the back end of the barrel up to remove it from the slide.
Note: The muzzle needs to align with the cuts in the front end of the slide.



SIG/Sauer P290 field stripped

Detail Strip:

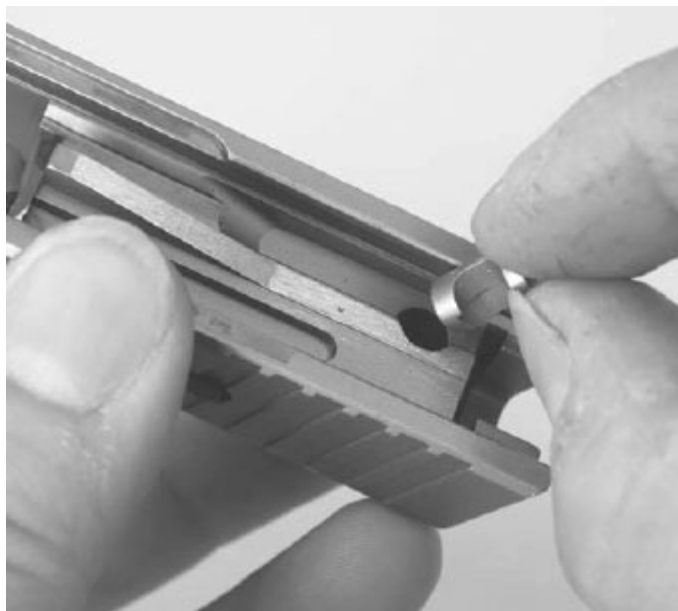


6. Remove the firing pin stop by pushing the firing pin into the

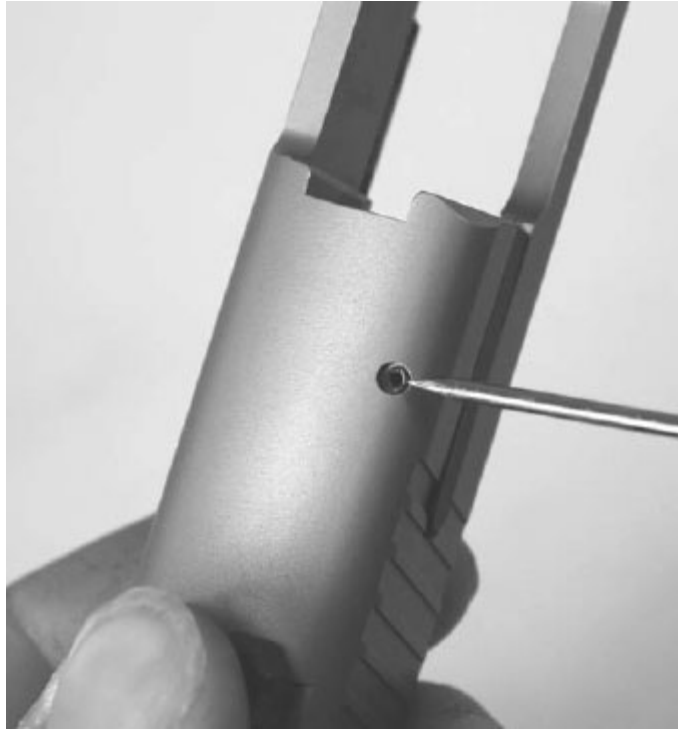
slide, then pulling the stop down and out. It will be necessary to depress the firing pin block simultaneously.



7. With the firing pin stop off, depress the firing pin block to free the firing pin and firing pin spring, which is under considerable compression.



8. Remove the firing pin block and spring.



9. Drive out this pin from top to bottom to remove the extractor and spring.



10. The front and rear sights can be drifted out to the left.



11. Remove this screw to remove the slide stop spring.



12. Drive out the trigger pivot pin. This will free the trigger spring which can be pulled out the top of the frame.



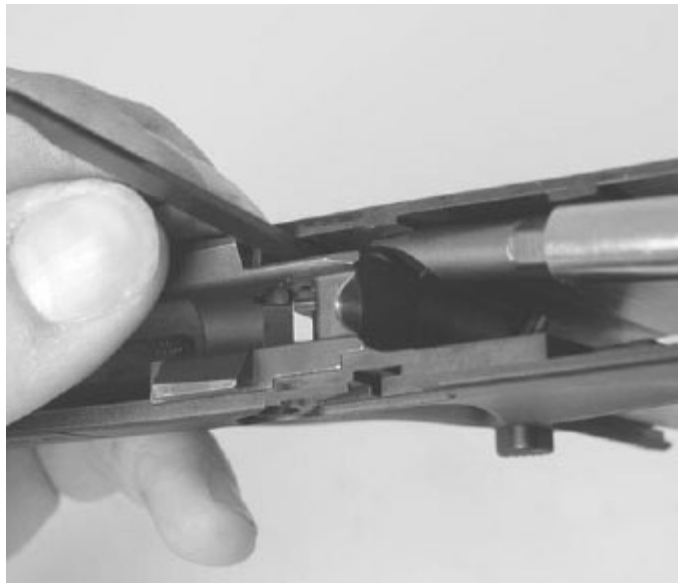
13. Drive out the rear housing pin.



14. The side panels can now be removed.



- 15.** Pull the rear housing up out of the frame. The trigger bar will disengage and come out of the front of the housing.



- 16.** Using a screwdriver, gently pry the right side of the frame slightly outward to allow the trigger bar enough room to detach from the trigger. **Note:** Take care to not damage the frame. The wall

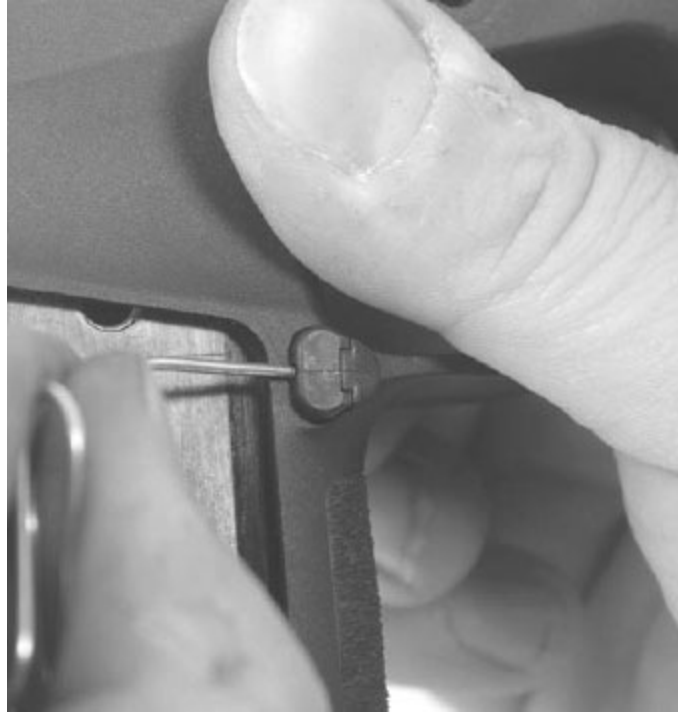
displacement required is extremely minor.



- 17.** The trigger can be removed from the frame by dropping it through into the trigger guard.



- 18.** The trigger bar spring can be pulled up out of the frame.



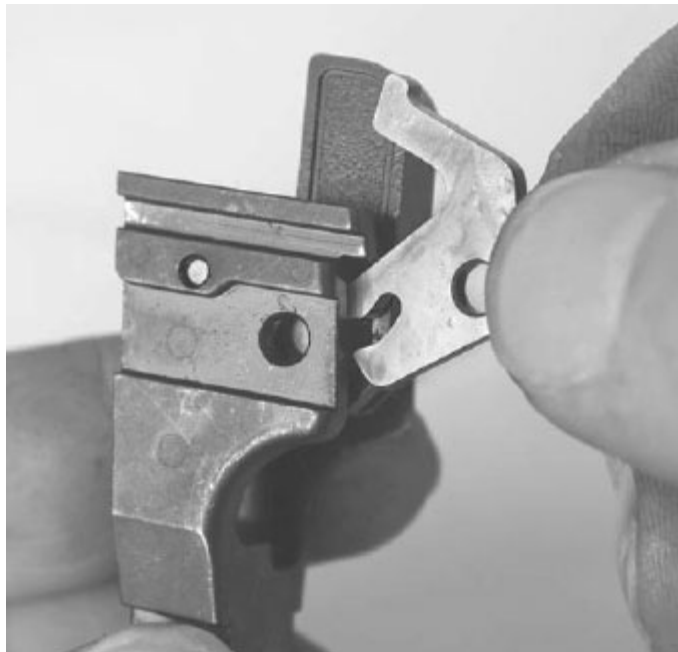
- 19.** Fully depress the magazine catch. On the right side of the frame, use a small tool to remove the magazine catch stop by inserting it into the hole in the back of the catch and pushing forward to disengage the magazine catch stop.



- 20.** Pull the magazine catch stop out to the right side of the frame. Once the magazine catch stop has been removed, the catch can be removed from the frame in the direction opposite the catch.

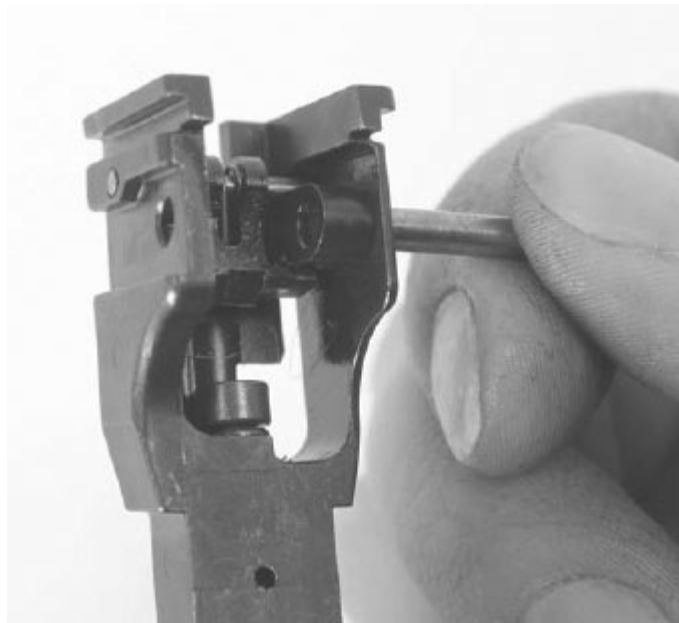


- 21.** Remove the ejector from the hammer pivot pin.

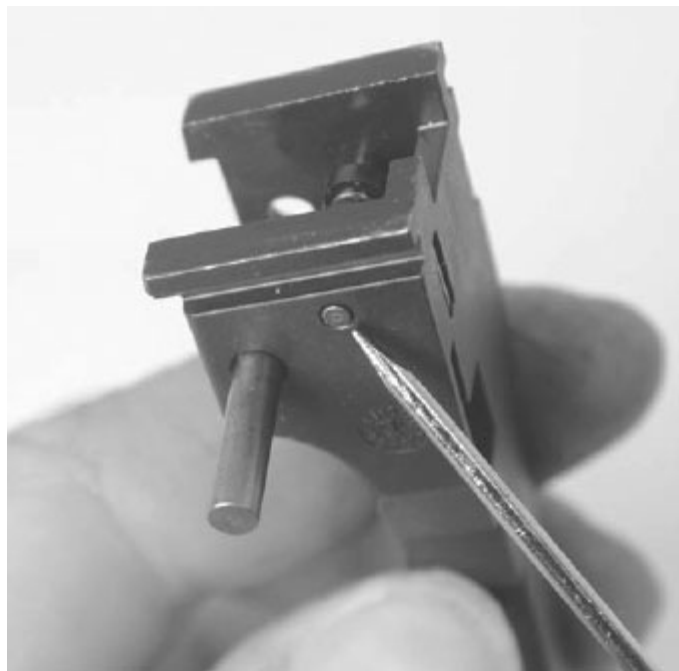


- 22.** Push out the hammer pivot pin just far enough to remove the

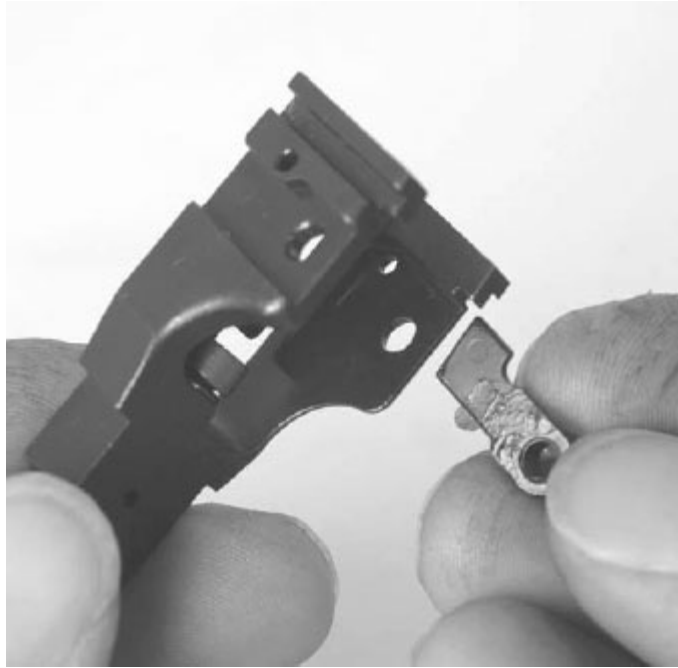
firing pin disconnect, then pull the firing pin disconnect out to the rear of the housing.



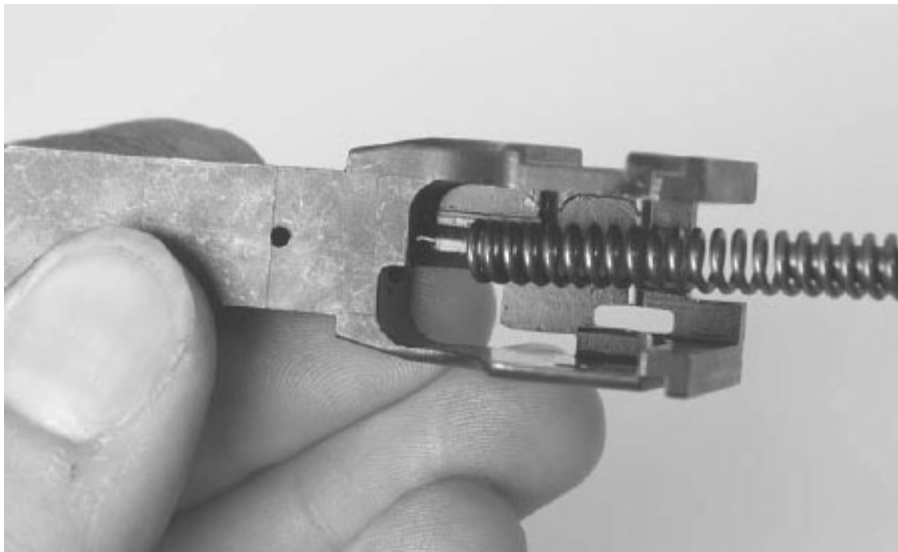
- 23.** Push the hammer pivot pin out the rest of the way, freeing the hammer (**Note:** Hammer is under some spring compression) and the trigger bar disconnect. The trigger bar disconnect cannot be removed until the sear has been removed from the housing.



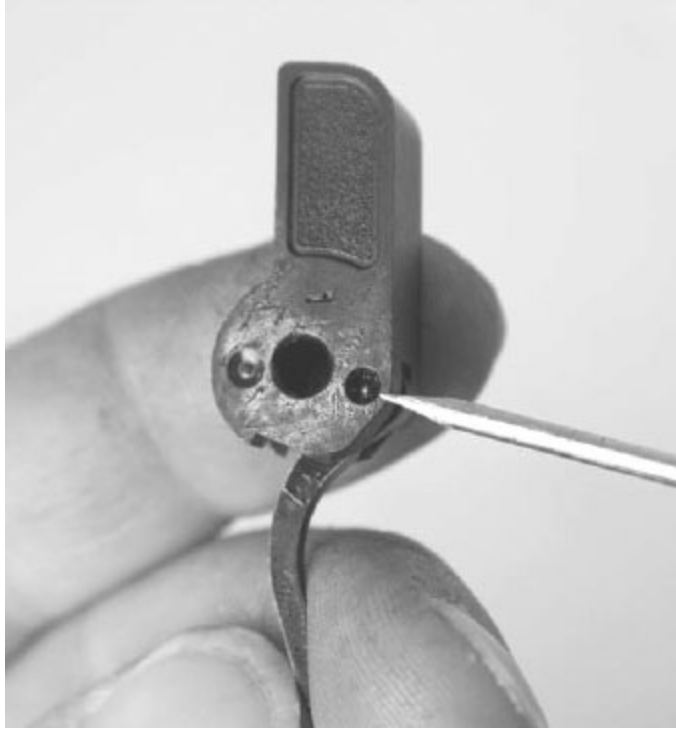
24. Push out the sear pivot pin to remove the sear and sear spring.



25. The trigger bar disconnecter can now be removed from the housing.



26. Invert the housing to remove the hammer spring, mainspring seat, and mainspring housing pin lock from the housing.

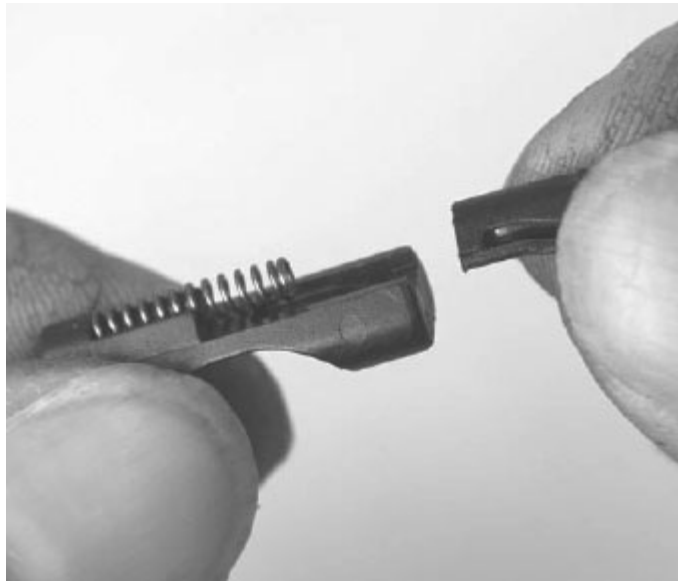


27. The hammer strut should not be removed unless it needs replacement.



28. The rubber laser plug can be removed for installation of a laser by turning 90 degrees and pulling it out of the frame.

Reassembly Tips:



1. The magazine catch, spring, and stop should align like this in the frame. Simply install the catch then push in the stop from the opposite side.



2. The hammer must be preloaded before the slide is reinstalled. If

the hammer is not preloaded (in the position in the picture) the firing pin disconnecter will prevent the slide from going further back than the rear housing.

Smith & Wesson 59



Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson 59 also apply to the following gun:

Smith & Wesson Model 39

Data: Smith & Wesson Model 59

Origin: United States

Manufacturer: Smith & Wesson, Springfield,
Massachusetts

Cartridge: 9mm Luger (Parabellum)

Magazine 14 rounds

capacity:

Overall 77/16 inches

length:

Height: 5½ inches

Barrel length: 41/16 inches

Cartridge: 28 ounces

The Model 59 was essentially a Model 39 with an expanded magazine capacity. The wider magazine necessitated a few minor changes in the frame and its internal parts, but the slide assemblies of the two guns are virtually identical. With some slight variations, most of the instructions which follow can be applied to either the Model 59 or Model 39.

Field Strip:



1. With the hammer cocked and the magazine removed, grip the pistol as shown and move the slide back until the forward end of the slide-latch is aligned with the latch cut in the lower edge of

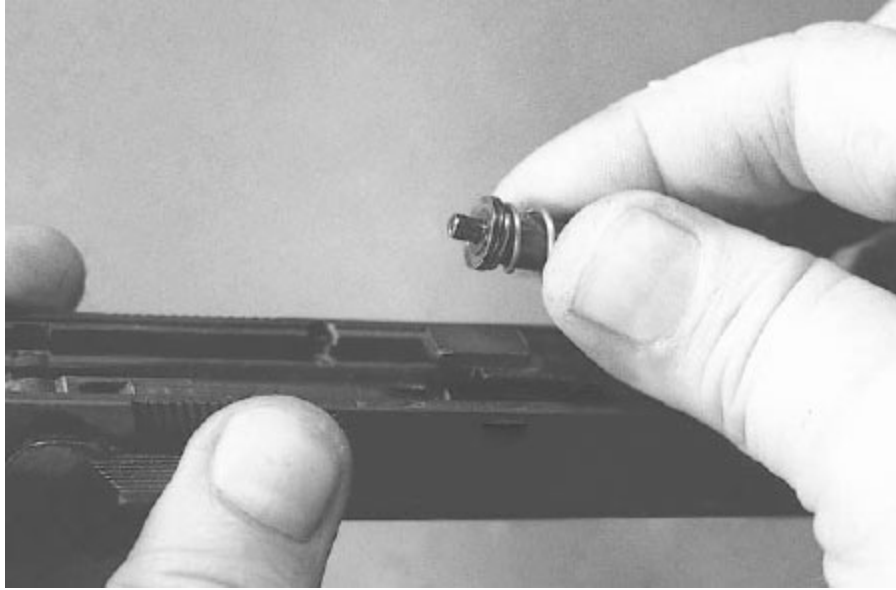
the slide.



2. Starting the latch by pushing on its extended end on the right side, withdraw it from the left side.



3. Move the slide assembly forward off the frame. The hammer will be released to fall as the slide passes over the automatic hammer-drop, so keep a thumb on it and ease it down.



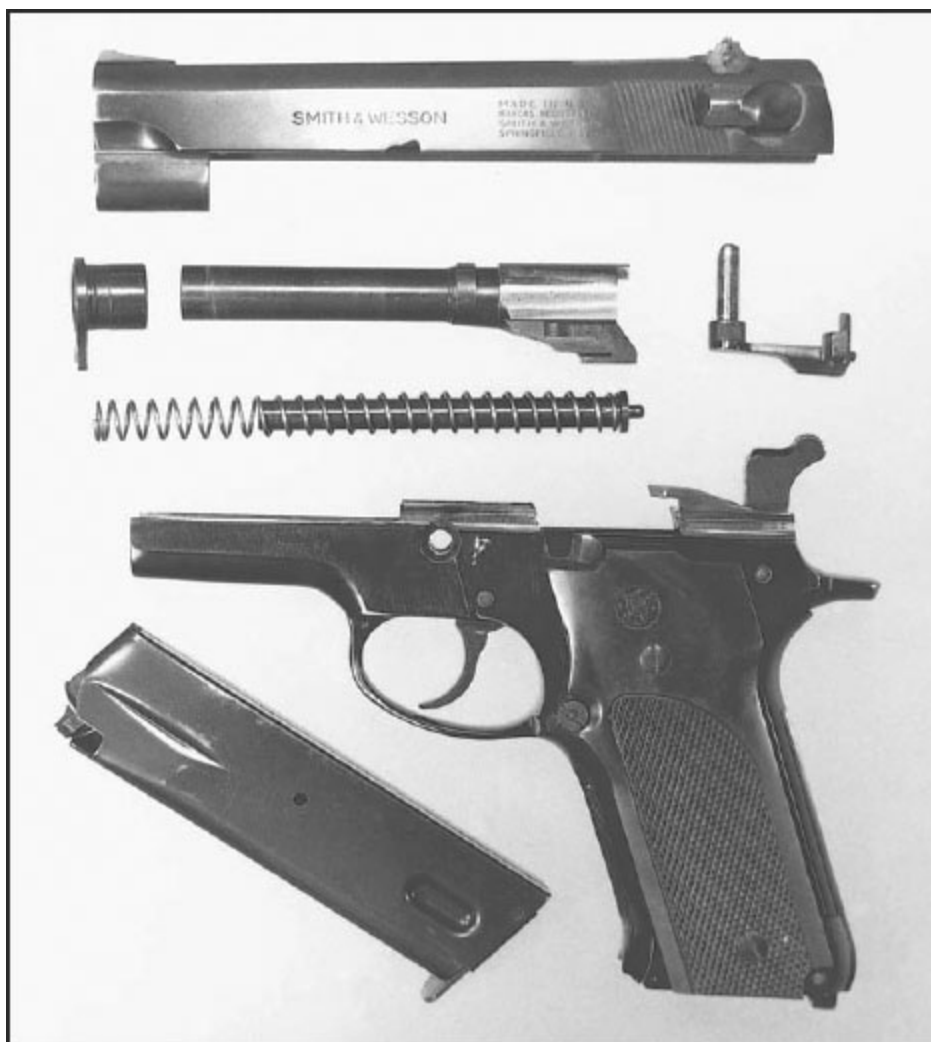
4. Move the recoil spring slightly forward, lift it up from its recess on the barrel, and remove the guide and spring from the underside of the slide. **CAUTION:** *Spring is under compression. Proceed with care.*



5. Turn the barrel bushing to the left until its lug aligns with the open track, and remove the bushing toward the front.



6. Lift the barrel at the rear and remove it from the bottom of the slide. **Gun is now field-stripped.**

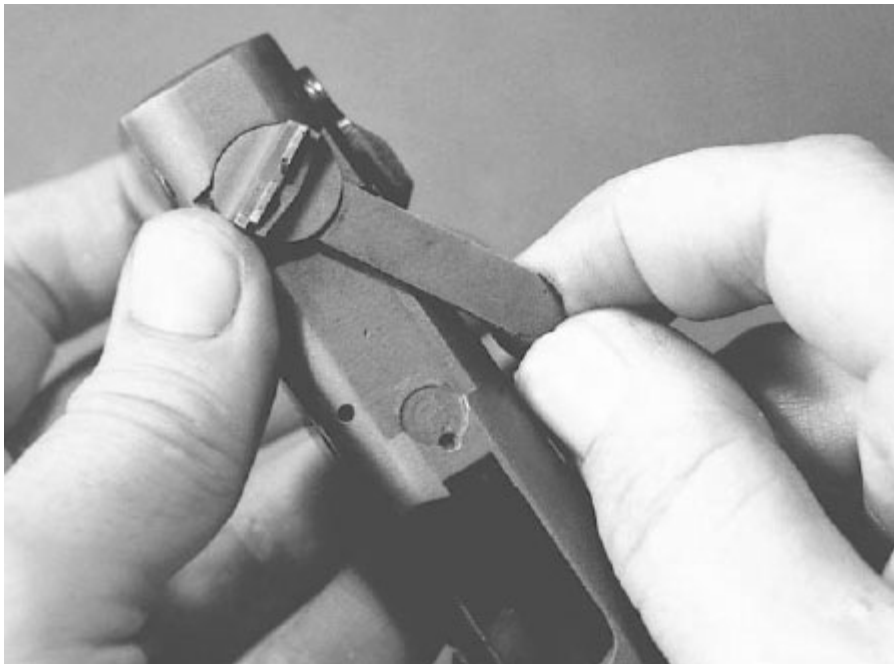


Smith & Wesson 59 field-stripped

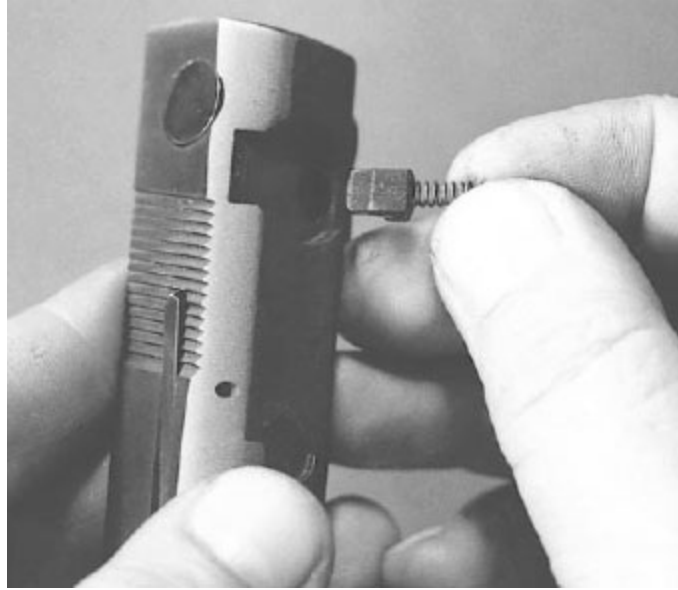
Detail Strip:



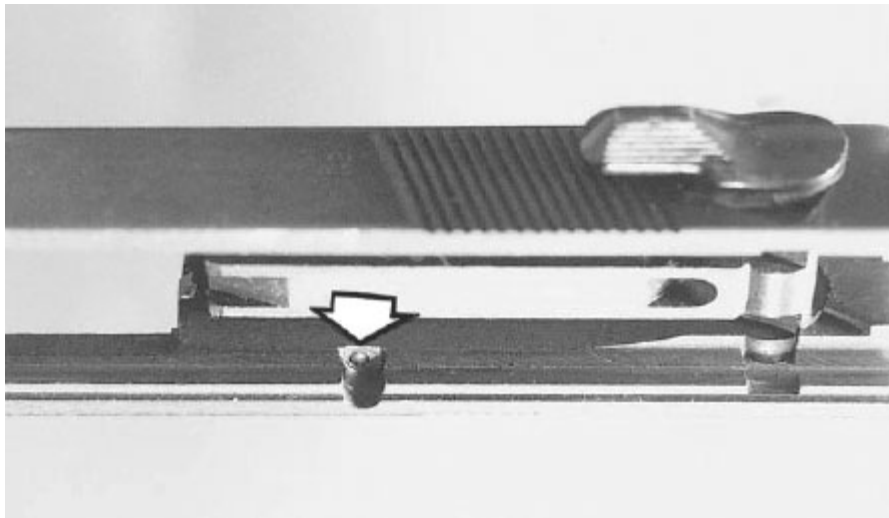
- 7.** With a small screwdriver lift the front tab of the rear sight out of its recess in the top of the slide.



- 8.** Move the front tab of the sight out toward the left side of the slide, rotating the rear base of the sight. When the tab of the sight is straight out to the side, the sight can be lifted off the top of the slide.



- 9.** Lift the ejector depressor plunger and its spring (this is actually the magazine safety actuator) from its well in the top of the slide.



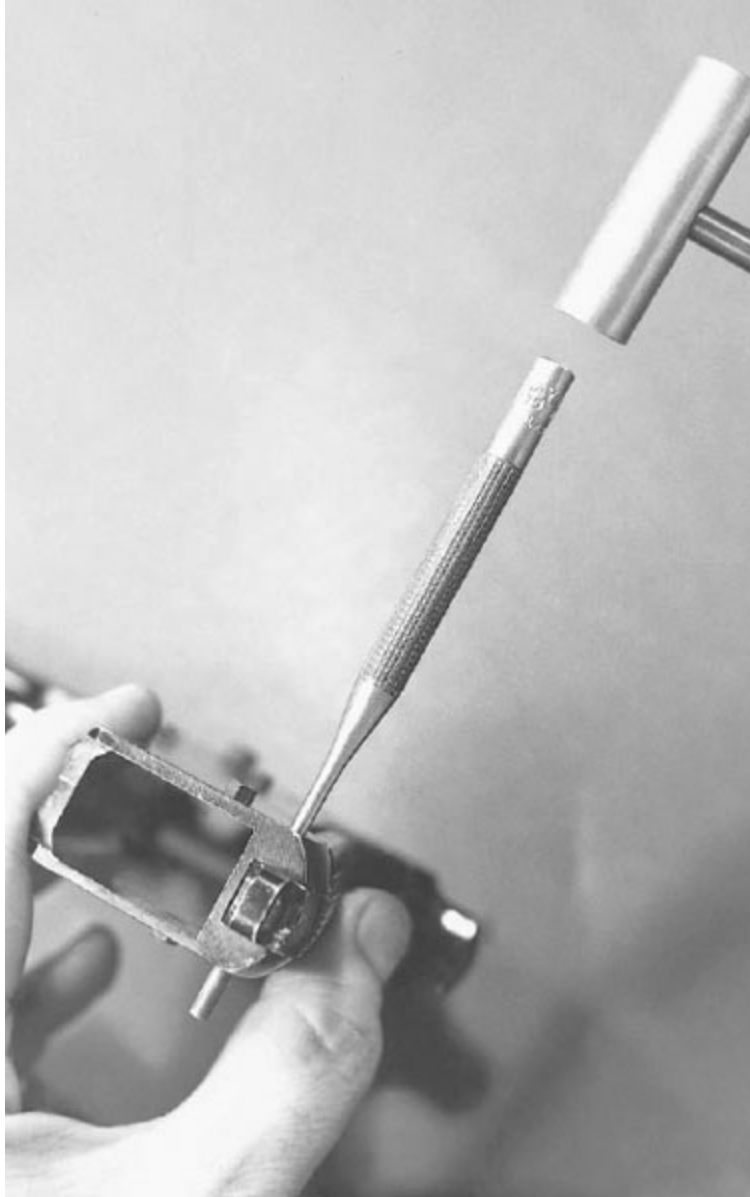
- 10.** The extractor pin (arrow) is visible on the underside of the slide in a recess on the right side. Drifting out this pin will free the extractor and its spring.



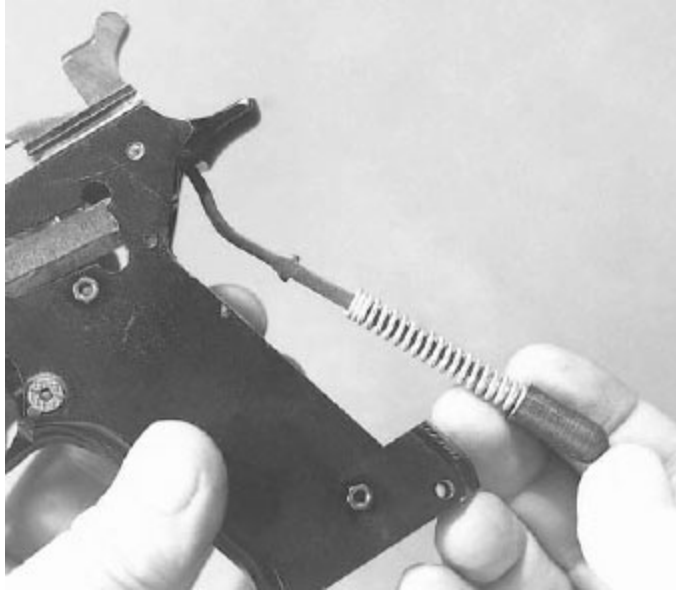
- 11.** With the safety in the off-safe position, use a drift to depress the firing pin beyond the safety drum, and nedge the safety out toward the left side of the slide. Removal of the safety will free the firing pin and its spring to be taken out toward the rear. The safety plunger and its spring can also be removed from inside the right wall of the slide.



- 12.** With a drift punch of the proper size, remove the pin at the lower rear of the grip frame, and take off the frame insert (backstrap).



- 13.** For removal, the backstrap is moved straight to the rear. When it has cleared the lower shoulders of the frame, the tension of the hammer spring will force it down and off.



- 14.** Remove the hammer spring and its hollow plunger from the lower end of the hammer strut.



- 15.** Remove the hammer pivot and its plate from the right side of the frame.



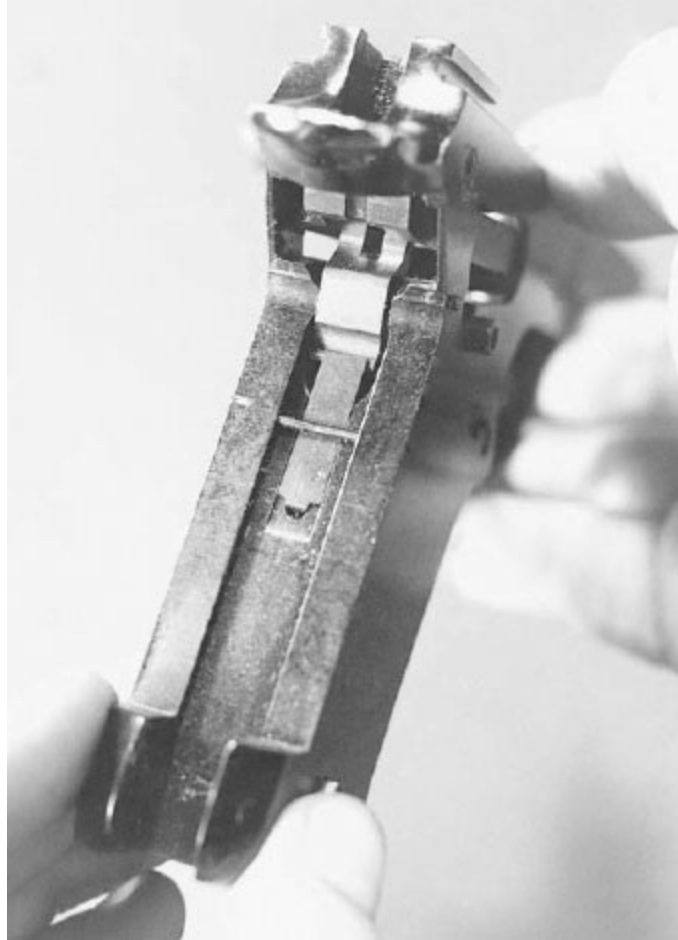
16. Lift the ejector from the top of the frame and remove the ejector spring from its well.



17. Remove the hammer and attached hammer strut from the top of the frame.



18. The sear release lever must be tipped forward and tilted to the left for removal.



- 19.** A small diameter cross-pin in the back of the grip frame retains the flat sear spring.



- 20.** The sear is retained by a cross-pin (arrow) at the upper rear of the frame, and is removed downward. Taking out the sear will also free the disconnecter for removal downward. The magazine release button on the left side has a small release beside it, level with the frame surface. When the small release tab is depressed, the magazine release button can be unscrewed from the magazine catch. The button, release plunger, and spring are removed toward the left, the magazine catch piece to the right.



- 21.** The trigger is retained by a cross-pin directly above it. When this is drifted out, the drawbar can be removed toward the rear of the frame, and the trigger spring and plunger taken out the top of the frame. The trigger is also moved up and out of the frame. The trigger play spring is riveted to the drawbar, and removal is not advisable unless necessary for replacement.

Reassembly Tips:

When replacing the trigger drawbar, do not reinsert the trigger pin until the drawbar is hooked over the top of the trigger. Be sure the trigger spring plunger tip is properly centered in its recess in the front of the drawbar before positioning trigger and inserting pin.

Pull the trigger to depress the sear while inserting the sear release lever in the frame and starting the hammer pivot through the loop on the lever. Otherwise, the sear will bear on the lever and make positioning difficult.

When inserting the disconnect, its lower arm must be turned

slightly to the side to clear the block at the rear center of the drawbar.



1. When moving the slide back into the frame, the ejector, then the sear release lever, must be depressed to clear the rear of the slide.

Smith & Wesson 459

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson 459 also apply to the following guns:

Smith & Wesson Model 439

Smith & Wesson Model 469

Smith & Wesson Model 639

Smith & Wesson Model 645

Smith & Wesson Model 659

Smith & Wesson Model 669



Data: Smith & Wesson Model 459

Origin: United States

Manufacturer: Smith & Wesson, Springfield,
Massachusetts

Cartridge: 9mm Luger

Magazine 14 rounds
capacity:

Overall $7\frac{7}{16}$ inches
length:

Height: $5\frac{11}{16}$ inches

Barrel length: 4 inches

Cartridge: 28 ounces

Except for the fully adjustable rear sight in its protective mount, the Model 459 and 439 pistols look very much like the Models 59 and 39 which they replaced. Inside, though, there were extensive mechanical changes which make the takedown and reassembly very different in some areas. One of the most notable additions is an automatic firing pin block safety system. This series of S&W pistols is now being referred to as the “second generation.” In addition to the models mentioned above, it also includes Model 639 and 659 (stainless steel), the compact versions, Models 469 and 669, and the 45 ACP, Model 645.

Field Strip:



1. Remove the magazine and cock the hammer. Move the slide toward the rear until the slide-latch notch in its lower edge is aligned with the pivot of the slide latch, and hold it there.



2. Use a non-marring tool to push the right tip of the slide-latch cross-piece toward the left.



3. Remove the slide-latch toward the left. Move the slide back to its normal position, and use the safety to drop the hammer to the fired position. Return the safety to off-safe, and move the slide assembly forward off the frame.



4. Grip the recoil spring and guide firmly to control the spring tension, and lift the spring assembly away from the barrel, removing it toward the rear. The slide-latch plunger and spring, mounted inside the rear of the recoil spring guide, are staked in

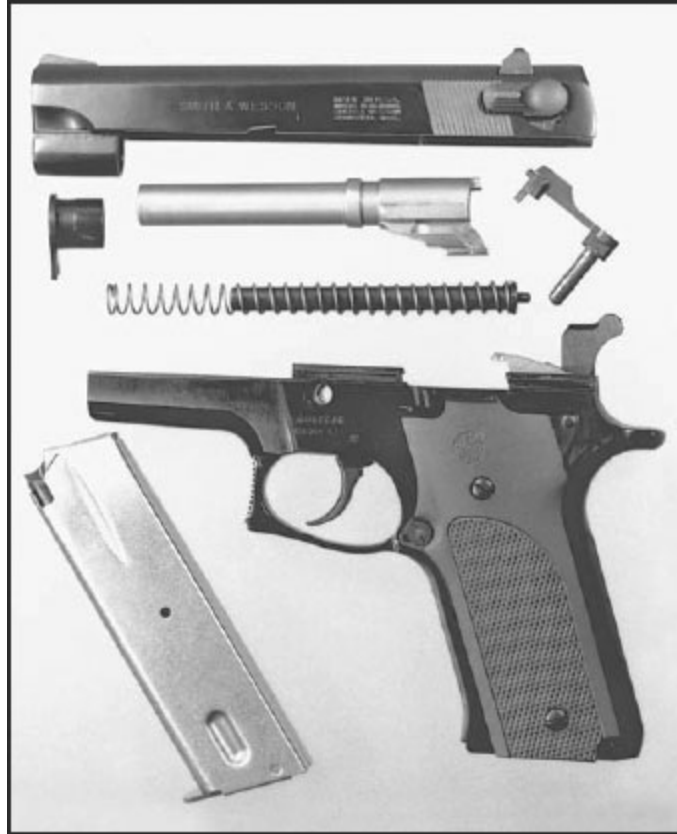
and should not be disturbed.



5. Turn the muzzle bushing counterclockwise (front view) until it stops, then remove it toward the front.



6. Move the barrel slightly forward, then tip it downward at the rear and remove it from the bottom of the slide. **Gun is now field-stripped.**

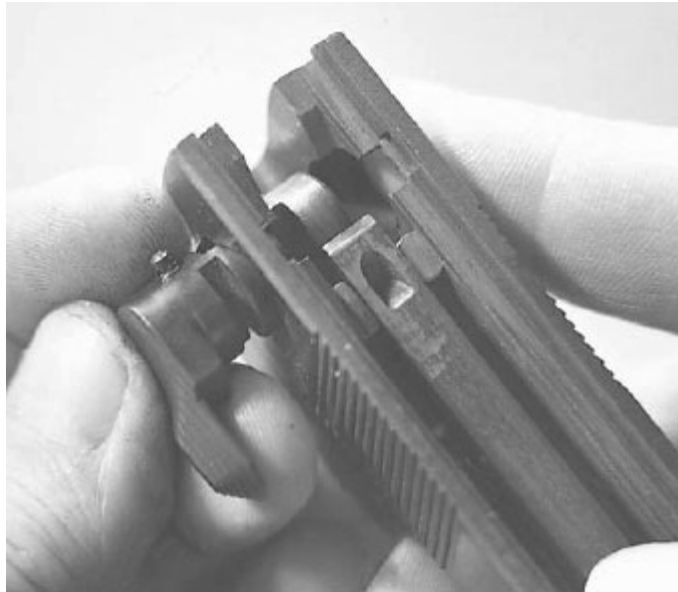


Smith & Wesson 459 field-stripped

Detail Strip:



7. Depress the firing pin safety block, on the underside of the slide at the right, and use a slim tool to push the firing pin forward until it stops. Release the safety block, and the firing pin will be held forward.



8. In its forward position, the firing pin head will still protrude slightly into the safety cross-piece. Insert a tool to depress it to clear the safety, and push the safety, in off-safe position, toward the left. The small positioning plunger and spring at the lower rear of the safety cross-piece will be released as the safety moves out of the slide, but they will usually stay in their recess. Remove the safety toward the left.



9. Restrain the firing pin at the rear, and once again depress the firing pin safety block. The firing pin and its spring will be released for removal toward the rear.



10. Alternately depress the rear sight hinge plungers on each side.



- 11.** Restrain the plungers as they clear the sides of the sight mount, and remove the sight upward and toward the rear. Disassembly of the sight itself is not recommended.



- 12.** With an Allen wrench or screwdriver bit, remove the screw on the left, inside the rear sight mount.



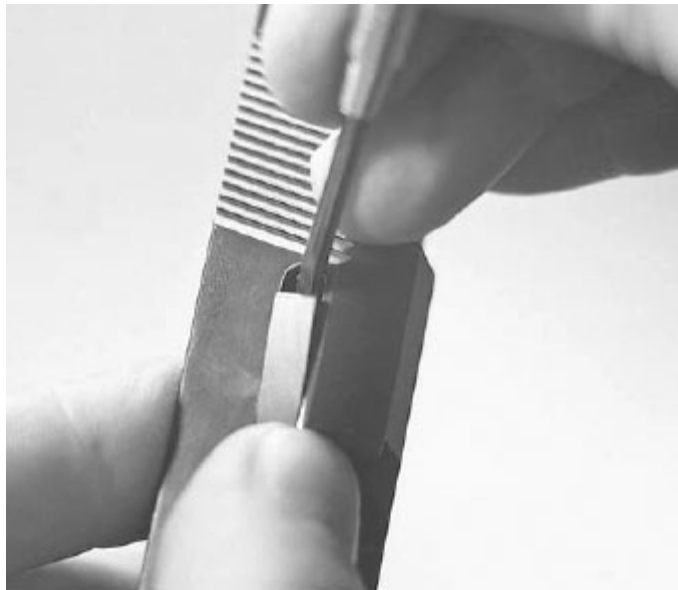
- 13.** Slide the rear sight mount out of its dovetail in the slide, and restrain the two vertical coil springs that will be cleared.



- 14.** Remove the firing pin safety block and its spring from the top of the slide.



- 15.** Remove the magazine safety plunger and spring from the top of the slide.



- 16.** Insert a small sharp screwdriver between the extractor and its plunger, and turn the blade slightly, forcing the plunger toward the rear, and lever the extractor out of its recess. Keep the plunger under control, and ease the spring and plunger out toward the front.



- 17.** With the hammer in the fired position, drift out the cross-pin at the lower rear of the grip frame.



- 18.** Push the lower end of the backstrap insert back until it clears its frame shelf, and it will be forced downward by the pressure of the hammer spring. Remove the insert downward and toward the rear.



- 19.** Remove the hammer spring plunger and the spring from the hammer strut.



- 20.** Remove the grips. Push the hammer pivot about one-third of its length toward the right. Remove the ejector upward, and take out the ejector spring from its well in the frame.



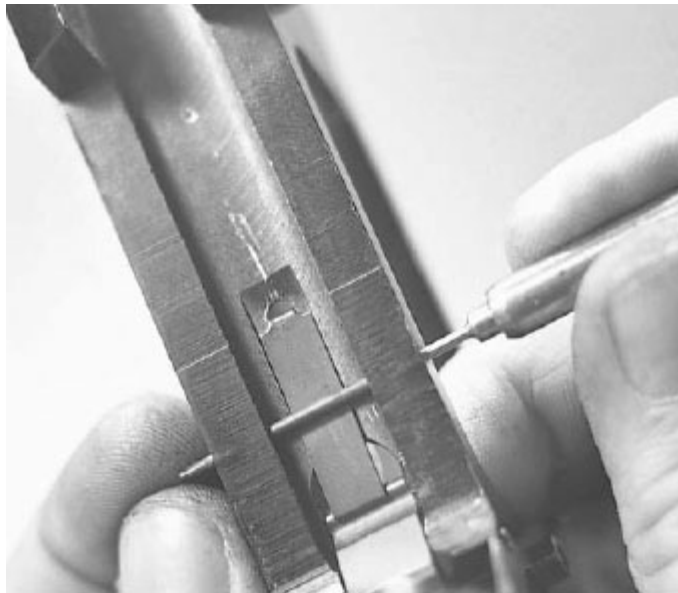
- 21.** Remove the hammer pivot toward the right, and take out the hammer upward. A roll cross-pin joins the strut to the hammer, and this can be removed to separate them, if necessary.



- 22.** Move the sear trip lever slightly toward the left, then remove it upward.



- 23.** Move the firing pin block lever slightly to the left, then rearward, and take it out upward. Remove the spring that powers these two parts from its well in the frame.



- 24.** Drift out the small cross-pin that retains the sear spring, inside the backstrap. This must be drifted out toward the right. Remove the spring toward the rear.



- 25.** Push out the sear cross-pin toward either side, and remove the sear downward.



- 26.** Turn the disconnector very slightly toward the right, to clear the trigger bar, and remove the disconnector downward.



- 27.** Insert a small screwdriver to restrain the trigger spring plunger, and push the trigger pivot pin out toward either side.



- 28.** Allow the trigger to move downward, slowly release the tension of the trigger spring and plunger, and remove the trigger bar toward the rear. The trigger play spring, riveted in place on top of the trigger bar, should not be disturbed.



- 29.** Remove the trigger plunger and spring toward the rear. Move the trigger to the rear of the guard, tilt it forward, and take it out upward. The trigger pivot retaining plunger and spring are mounted inside the trigger, and are retained by a small cross-pin. In normal takedown, these parts are best left in place.



- 30.** Depress the magazine release retainer, and unscrew the release button from the magazine catch cross-piece (counterclockwise, left side view). There is a tool slot in the button, but in most

cases the button can be unscrewed with the fingers. The button, retainer, and spring are taken off toward the left, and the catch piece toward the right.

Reassembly Tips:

When replacing the slide assembly on the frame, the ejector and the two small levers on the right must be depressed to go under the slide.

When moving the rear sight mount into place, alternately depress the two springs to avoid deformation.



1. When replacing the sear cross-pin, note that the reduced tip must go on the right, to mate with the hole in the hammer pivot plate.

Smith & Wesson 622

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson Model 622 also apply to the following guns:

Smith & Wesson Model 422

Smith & Wesson Model 2206



Data: Smith & Wesson Model 622

Origin: United States

Manufacturer: Smith & Wesson, Springfield,
Massachusetts

Cartridge: 22 Long Rifle

Magazine 10 rounds
capacity:

Overall 9 inches (6-inch barrel) 7½

length: inches (4½-inch barrel)

Barrel length: 4½ and 6 inches

Cartridge: 23 ounces (6-inch barrel) 22

ounces (4½-inch barrel)

There are two basic versions of this pistol, and each is available in either blued steel (Model 422) or stainless steel (Model 622). The Field version has fixed sights and Minlon grips, and the Target version has fully adjustable sights and checkered walnut grips. Both are offered in two barrel lengths. Mechanically, both Model 422 and Model 622 versions are the same, and these instructions will apply.

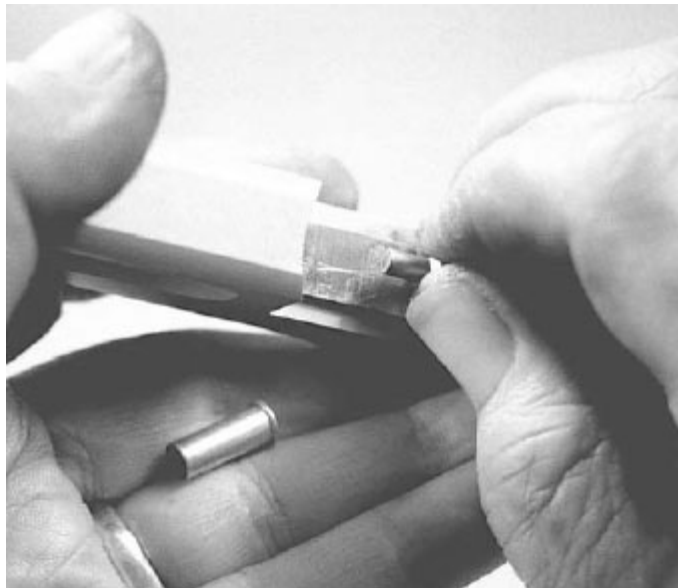
Field Strip:



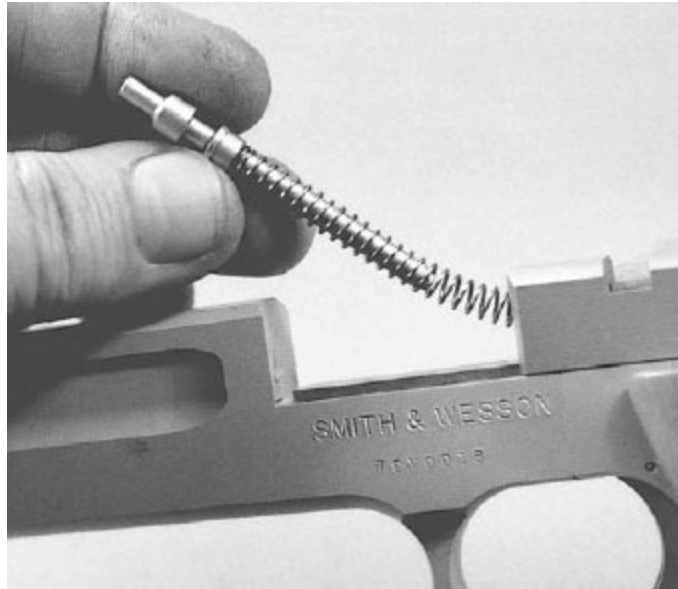
1. With the magazine removed and the internal hammer cocked, pull the slide back about one inch, and insert an empty 22 cartridge case, as shown, to contact the front tip of the recoil spring guide.



2. Ease the slide forward until it is stopped by the cartridge case, and lift the recoil guide plug upward out of the slide.



3. Move the slide toward the rear, and firmly grip the recoil spring guide. Move the guide toward the rear to release the cartridge case. **CAUTION:** *Control the guide and spring.*



4. Carefully ease the tension, tip the front of the guide upward, and remove the recoil spring and guide upward and toward the front.

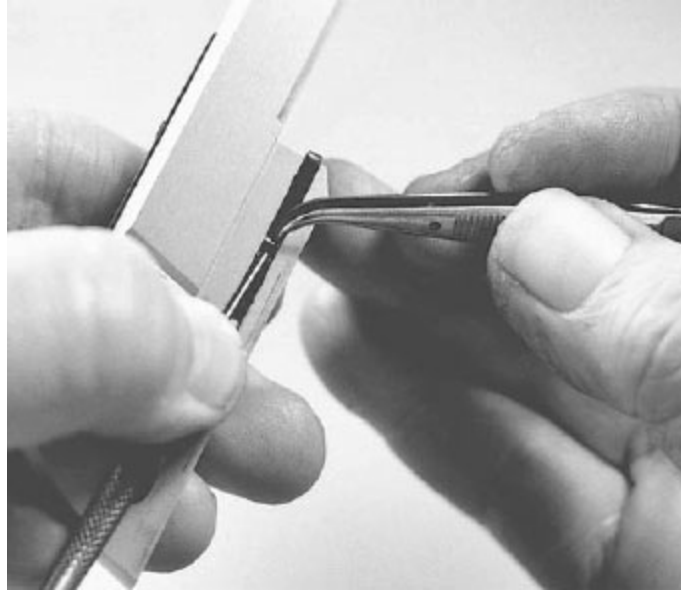


5. Remove the slide upward. **Gun is now field-stripped.**

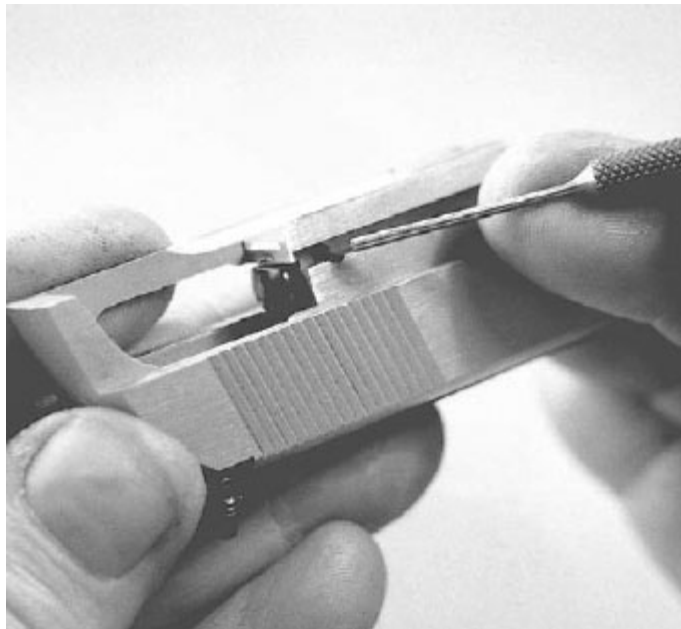


Smith & Wesson Model 622 field-stripped

Detail Strip:



6. The extractor and its two small coil springs are retained on the right side of the slide by a vertical pin which is rebated at the extractor contact point. Depress the extractor behind the pin, and use sharp tweezers to move the pin downward until its lower end can be grasped on the underside of the slide for withdrawal. Except for repair, this system should be left in place.



7. The firing pin and its return spring are retained by a roll cross-

pin. After the cross-pin is drifted out, the firing pin and its spring are taken out rearward.



8. On the Target versions, the adjustable rear sight is retained by a single screw in its forward extension. After the screw is removed, the sight is taken off rearward. On the fixed-sight Field versions, the sight is drifted out of its dovetail toward the right.



- 9.** With a screwdriver of proper dimensions, remove the grip panels. Use a small tool to detach the slide-latch spring, and remove it.

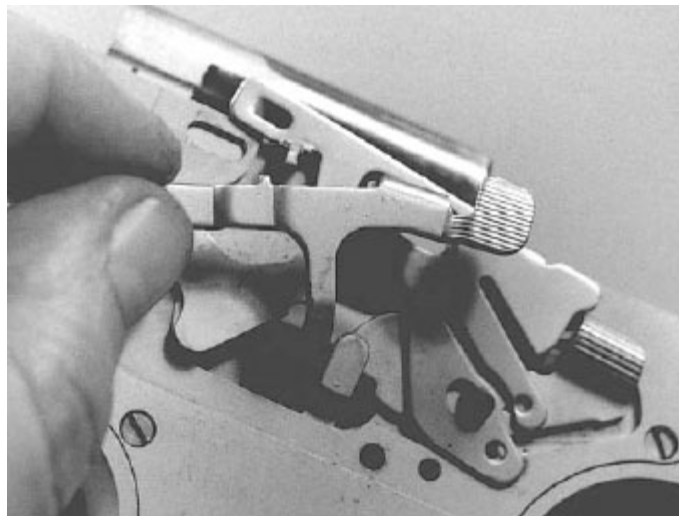


- 10.** On the right side of the frame, carefully remove the C-clip from

the tip of the slide-latch cross-shaft.



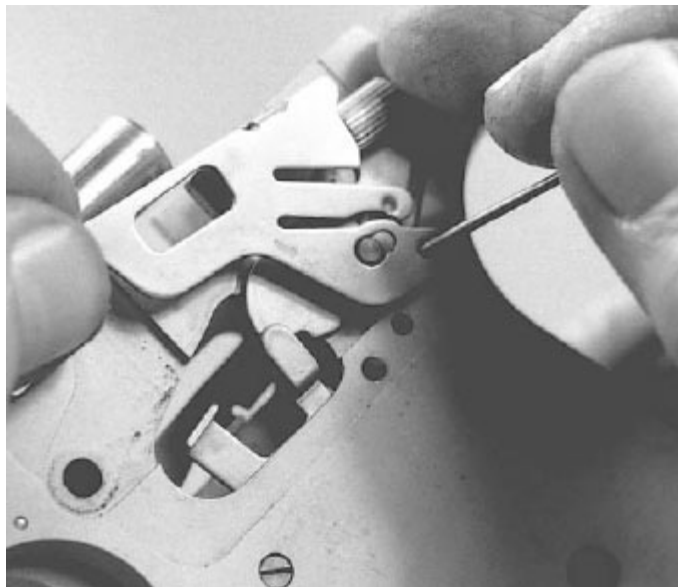
- 11.** From the right side, insert a tool to push the spring plate detent out of its recess in the frame, moving it slightly upward.



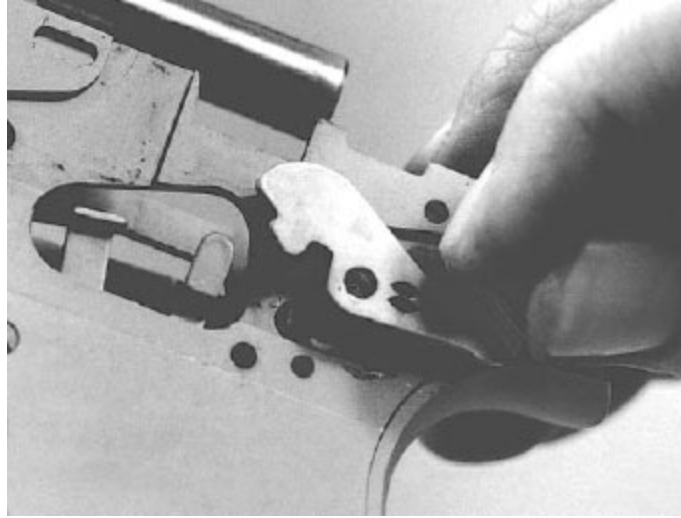
- 12.** Move the right plate up to the position shown, and remove the combination slide-latch and ejector toward the left.



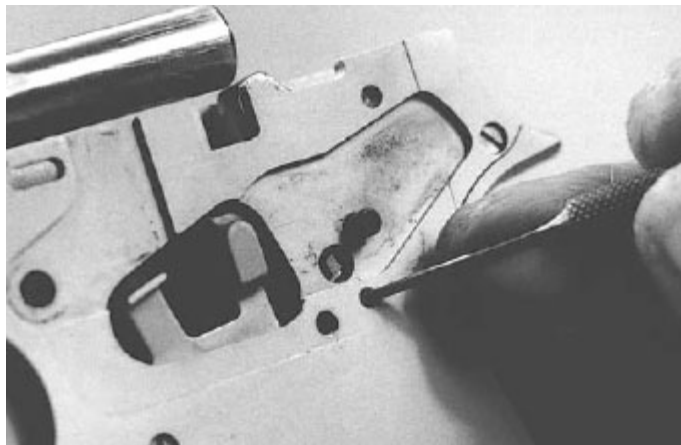
13. Remove the disconnecter toward the left.



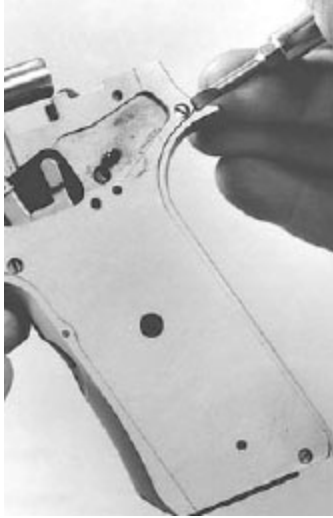
14. Insert a tool in the hole in the lower rear edge of the spring plate, and move it rearward until the larger opening aligns with the end of the hammer pivot. Remove the spring plate toward the left.



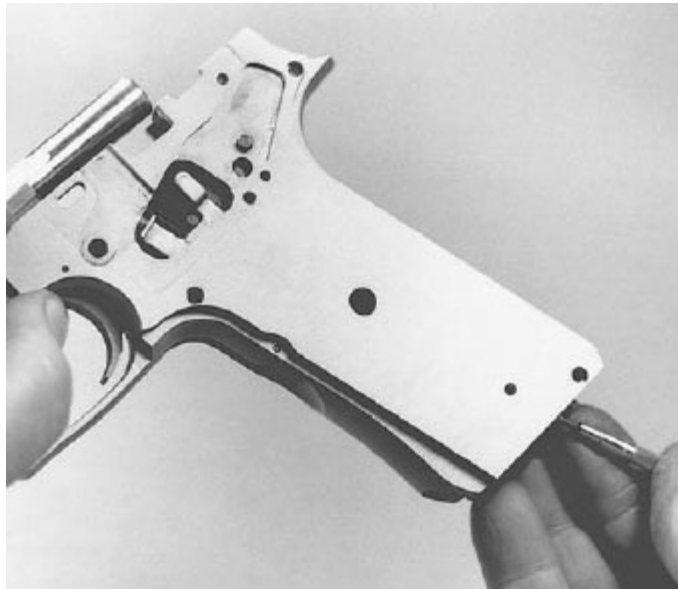
15. Remove the safety-lever toward the left.



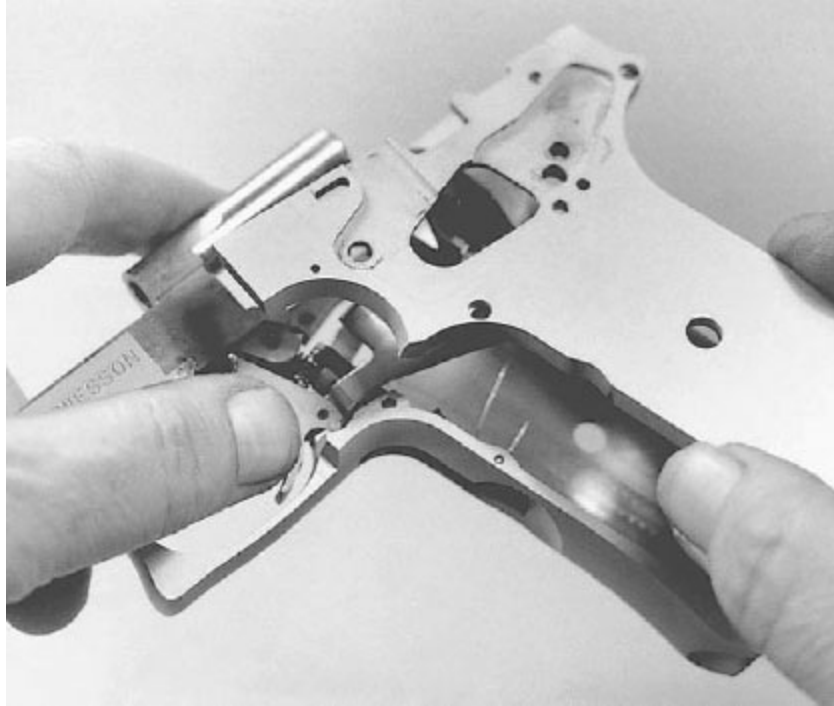
16. Insert the magazine to depress the magazine safety. Restrain the hammer, pull the trigger, and ease the hammer down to fired position. Push the sear pin about 1/8-inch toward the right, just enough to clear the sideplate.



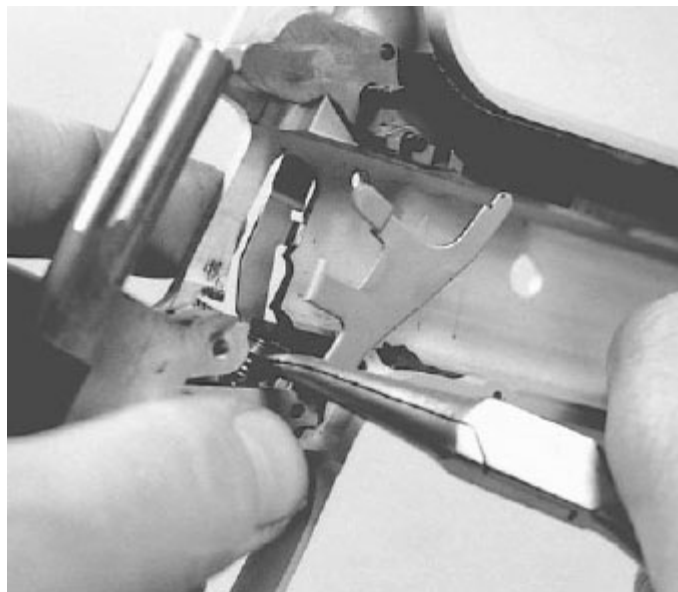
- 17.** Remove the three sideplate screws, at upper rear, lower rear, and behind the trigger.



- 18.** Working equally around the sideplate, keeping it as even with the frame as possible, gently pry the sideplate outward.



19. As the sideplate is removed, keep inward pressure on the trigger to hold it in place.



20. Detach and remove the combination trigger and magazine catch spring.



- 21.** Remove the trigger, trigger pin, and the attached trigger bar. The bar is retained on the trigger by a cross-pin, and if necessary for repair this can be driven out for removal.



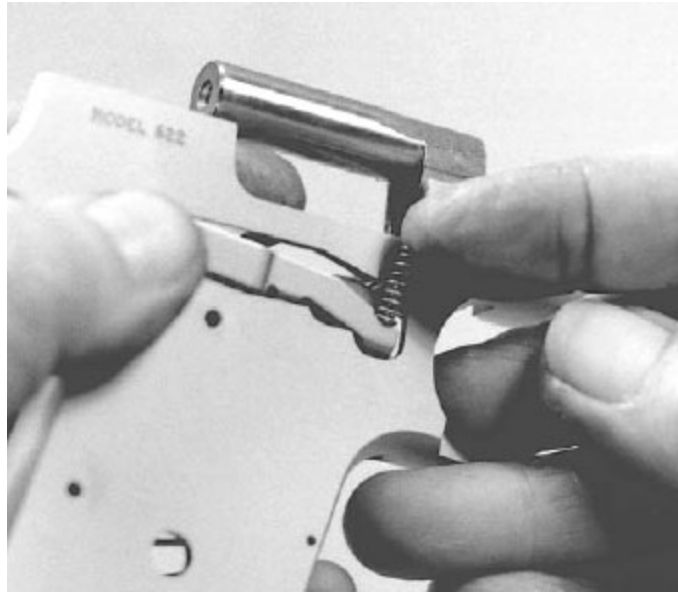
- 22.** Push out the magazine catch cross-pin, and remove the magazine catch downward and toward the front.



23. Push out the sear cross-pin, and remove the sear toward the left.



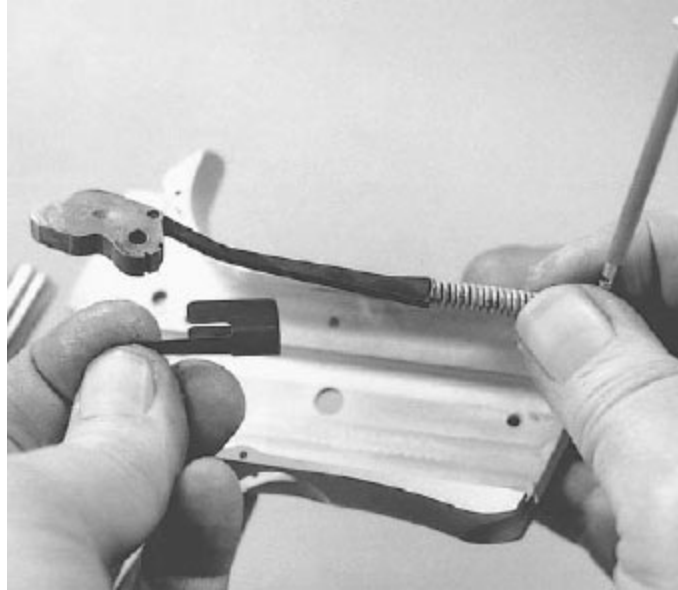
24. Move the hammer back until a small tool can be inserted in the hole in the lower tip of the hammer spring strut, as shown. Release the hammer, and the spring will be trapped on the strut.



25. Detach the magazine safety spring, and remove it.



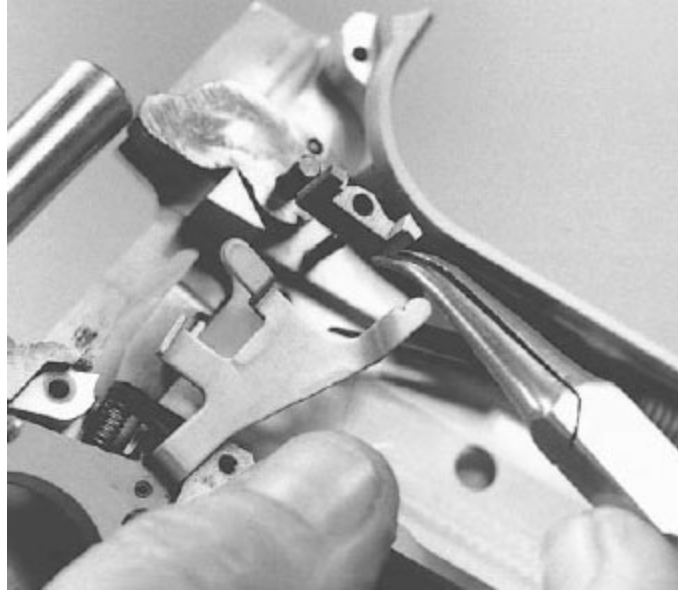
26. Remove the magazine safety and the hammer pivot toward the right.



- 27.** Remove the hammer and hammer spring assembly toward the left. Removal of these parts will also free the sear spring for removal. If the hammer spring unit is to be disassembled, remember that the spring is powerful and is fully compressed. Use caution. With a special wrench, the barrel nut and lockwasher can be taken off at the muzzle, and the barrel unit removed rearward, but in normal takedown this is not done.

Reassembly Tips:

When reinstalling the magazine safety and the hammer pivot, note that the forward tip of the magazine safety must be inserted into the frame slot first, at an angle, before the hammer pivot is pushed into place. Also, the magazine safety must be lifted slightly at the front during insertion of the trigger assembly, for proper engagement with the trigger.

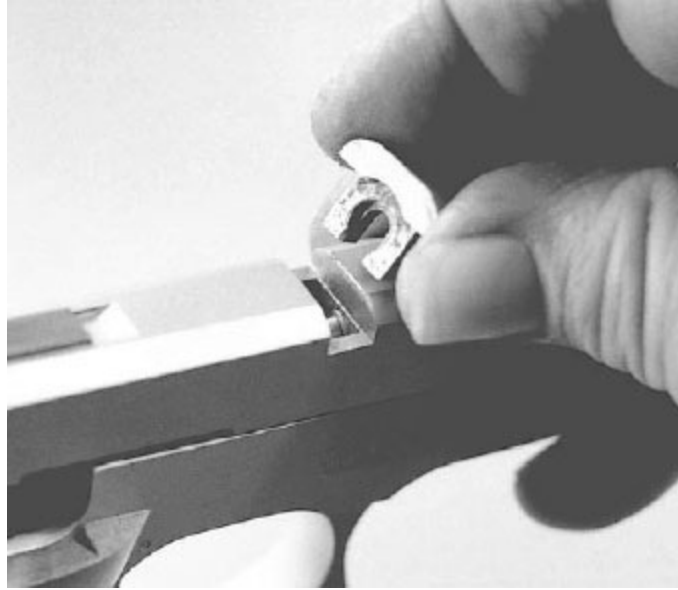


- 1.** When installing the sear, note that it must be oriented as shown. Remember that the leaf of the sear spring must go behind the lower end of the sear.

When the sideplate is in place, insert a tool to cock the hammer.



- 2.** For installation of the slide-latch, the spring plate must be in the slightly raised position.



- 3.** When replacing the recoil guide plug, remember that the recess in its lower extension must be toward the rear.

Smith & Wesson 5906

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson Model 5906 also apply to the following guns:

Smith & Wesson Model 3904

Smith & Wesson Model 3906

Smith & Wesson Model 4506

Smith & Wesson Model 4516

Smith & Wesson Model 5904

Smith & Wesson Model 6904

Smith & Wesson Model 6906



Data: Smith & Wesson Model 5906

Origin: United States
Manufacturer: Smith & Wesson, Springfield,
Massachusetts
Cartridge: 9mm Luger (Parabellum)
Magazine 14 rounds
capacity:
Overall 75/8 inches
length:
Height: 5½ inches
Barrel length: 4 inches
Cartridge: 32.34 ounces

In 1988, Smith & Wesson redesigned their 9mm and 45 ACP pistols, and the new “third generation” guns were given different model designations. The Model 659, for example, became the Model 5906 shown here. These instructions can also be used for the models 5904, 3904, 3906, 6904, 6906, 4506, and 4516. If the pistol has the optional fully-adjustable rear sight, refer to the Smith & Wesson Model 459 section for removal instructions.

Field Strip:



1. With the magazine removed and the hammer cocked, retract the slide until the pivot base of the slide-latch is aligned with the latch notch in the lower edge of the slide. Push on the right tip of the slide-latch cross-shaft to start it out toward the left, and remove the slide-latch.



2. Move the slide and barrel assembly forward off the frame. The hammer will fall to the fired position as the slide is removed.



3. Grasp the recoil spring guide firmly to control the strong spring, and disengage the guide from its step on the barrel underlug. **CAUTION:** *The spring is under tension.* Remove the guide and spring rearward.

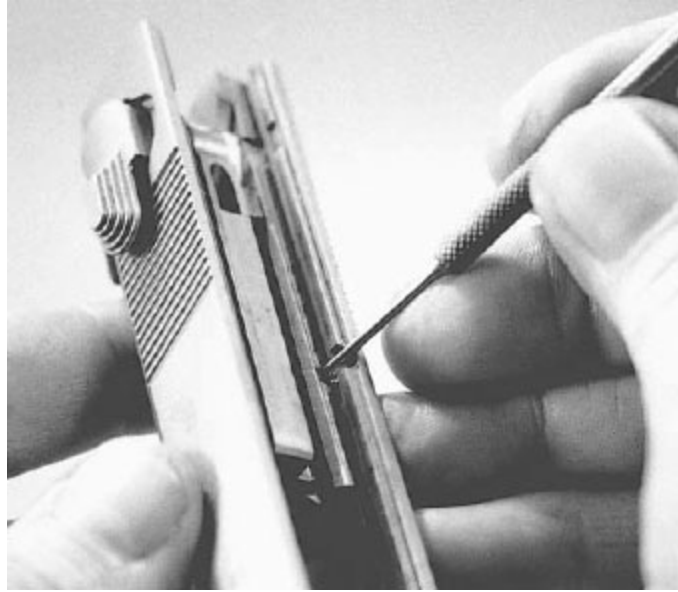


4. Remove the barrel from the underside of the slide. **Gun is now field-stripped.**



Smith & Wesson Model 5906 field-stripped

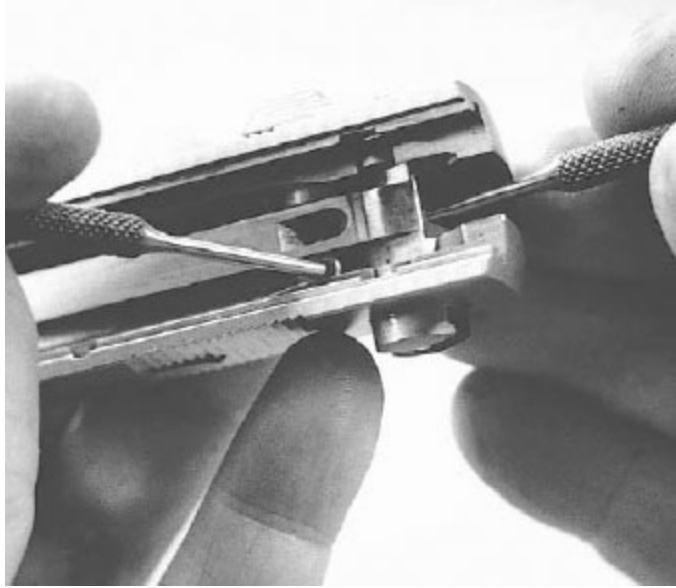
Detail Strip:



- 5.** The extractor and its spring are retained on the right side of the slide by a vertical pin. Drive the pin out upward, and take off the extractor and spring toward the right.



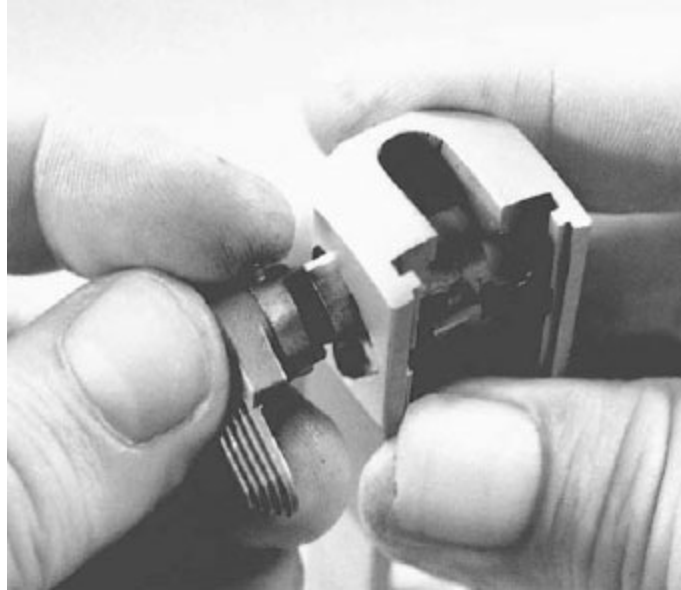
- 6.** Insert a small drift in the access hole at the center of the right safety-lever to depress the lock plunger, and slide the lever out of its T-slot in the safety. Restrain the plunger and spring as the lever clears.



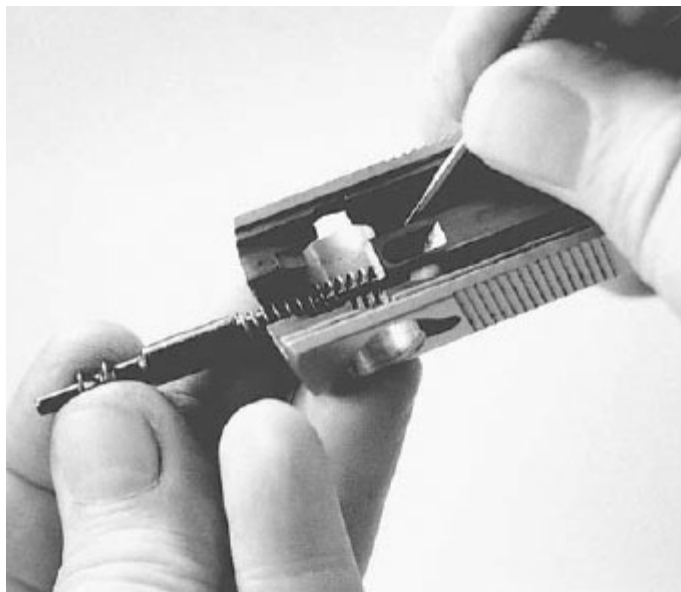
7. With the safety in the off-safe position, depress the firing pin block, and push the firing pin all the way forward. Release the block, holding the firing pin toward the front.



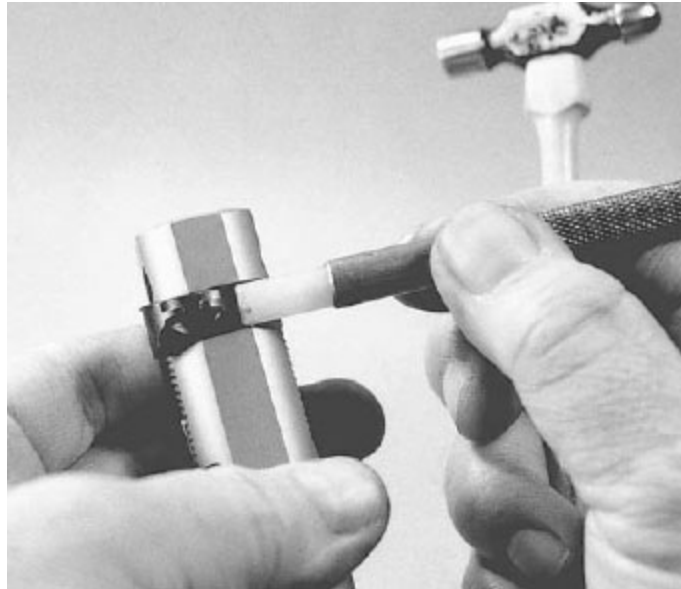
8. Turn the safety to the on-safe position, and insert a small tool to push the firing pin slightly more toward the front to clear. Move the safety out toward the left.



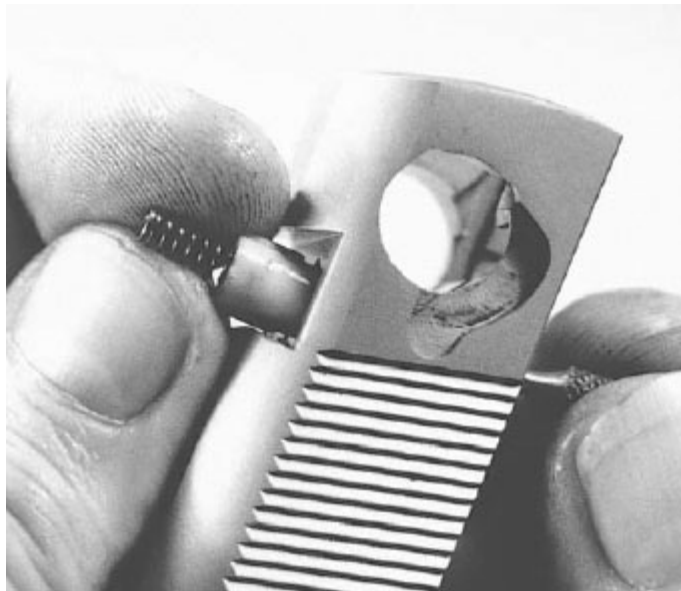
- 9.** Restrain the safety positioning plunger and spring as they emerge with the safety at upper rear. Remove the safety toward the left.



- 10.** Restrain the firing pin, depress the firing pin safety block, and remove the firing pin and its spring toward the rear. **CAUTION:** *The spring is compressed, so control the firing pin, and ease it out.*



- 11.** With a non-marring tool, drive the rear sight out of its dovetail toward the right. Restrain the two small coil springs as the sight clears them.



- 12.** Remove the ejector depressor and its spring upward.



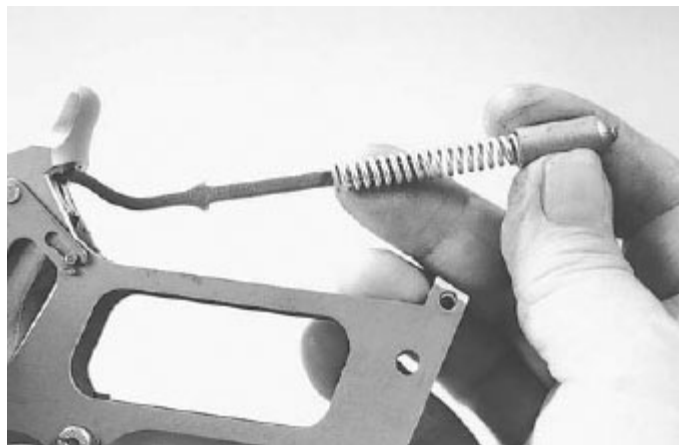
13. Remove the firing pin safety block and its spring upward.



14. Use a small drift to depress the plunger and spring, and push out the cross-pin in the lower rear of the grip piece.



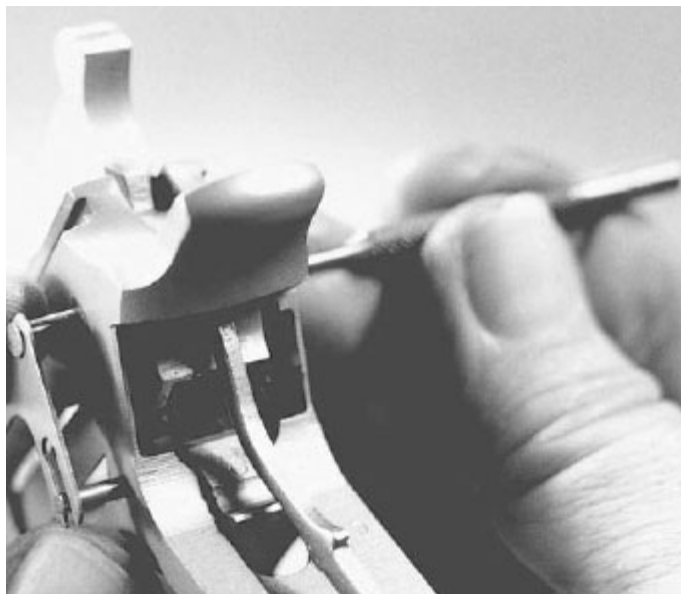
- 15.** Move the grip piece downward and toward the rear for removal. It will be necessary to flex the side panels outward to clear the frame.



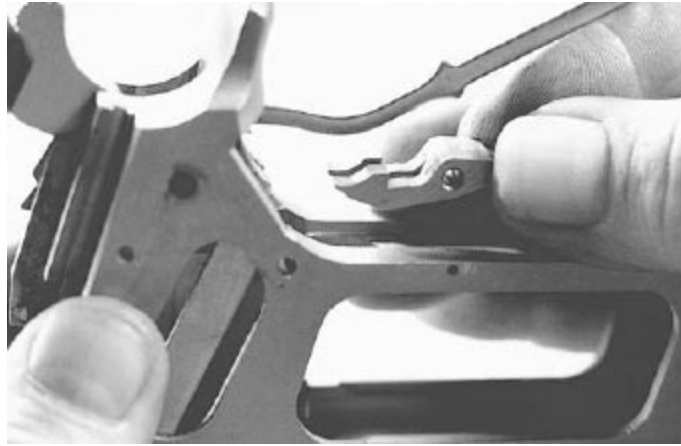
- 16.** Remove the hammer spring and its plunger downward.



17. Push out the small cross-pin tht retains the sear spring, and take the spring out toward the rear.



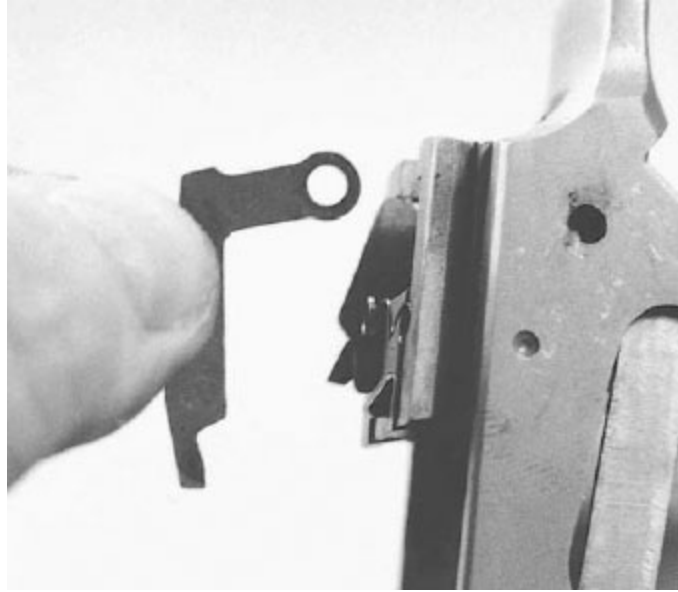
18. Push out the hammer pivot toward the left, along with the sideplate and the sear pivot.



19. Remove the sear from the frame.



20. The hammer and hammer strut can now be taken out upward. If necessary, the cross-pin can be driven out to free the hammer strut.



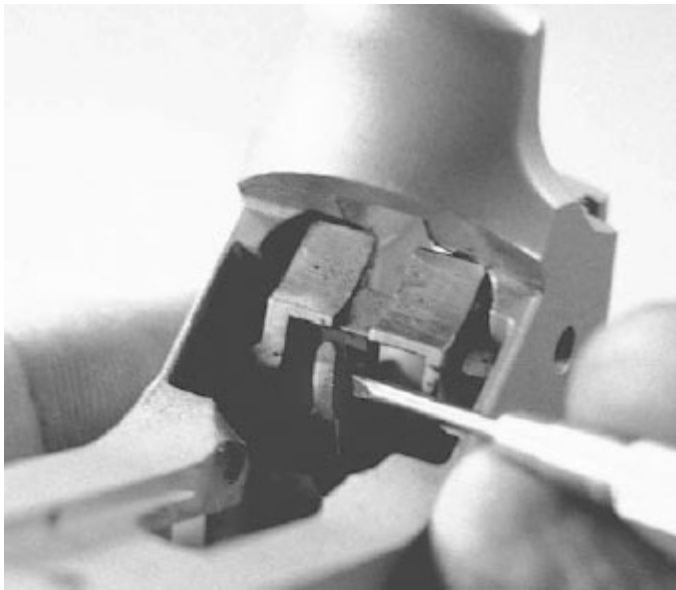
21. The ejector and its spring are now free to be taken out upward.



22. The sear trip lever can now be removed upward.



23. The firing pin safety block lever and the spring which powers it and the sear trip can now be taken out upward.



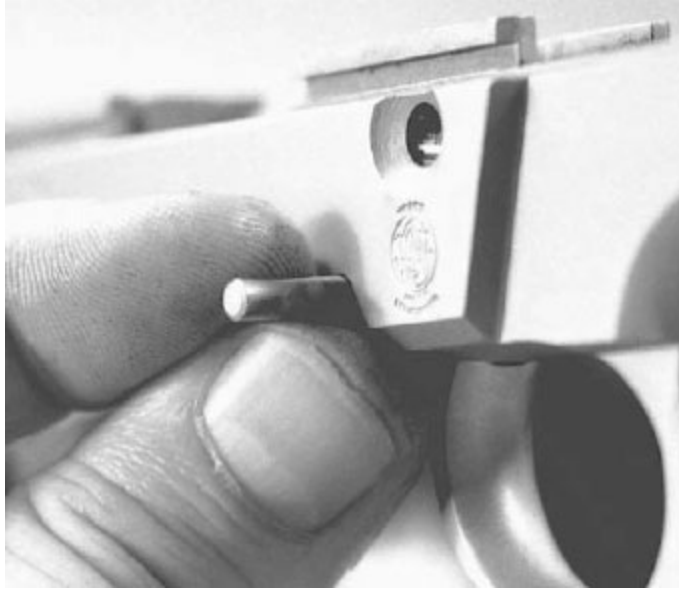
24. Turn the disconnecter slightly in either direction, until it clears the trigger bar, and remove it downward.



- 25.** Depress the small lock plunger beside the magazine catch button, and unscrew the button from the catch. A tool slot is provided in the button, but removal is usually easy to do with a thumbnail.



- 26.** Remove the button and the spring and plunger toward the left, and the magazine catch toward the right.



27. Drift out the trigger cross-pin.



28. Remove the trigger bar assembly toward the rear. The trigger play spring on the bar is riveted in place, and it is not routinely removed.



29. Remove the trigger spring and plunger from the frame.

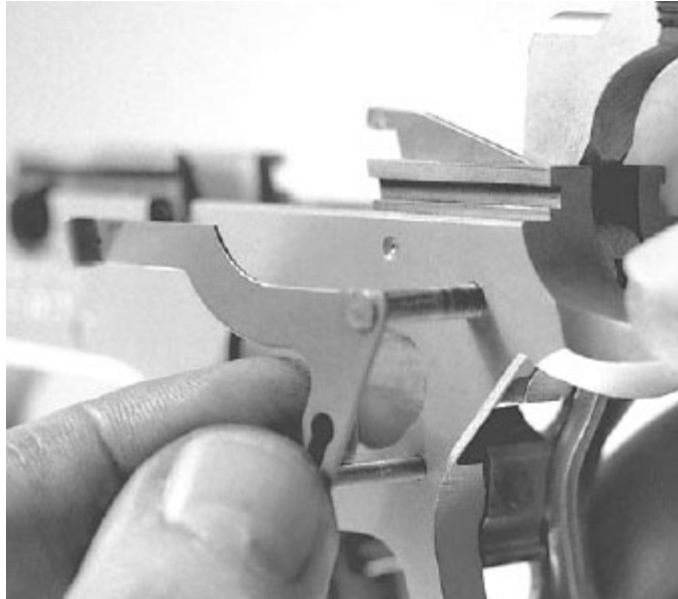


30. Remove the trigger forward and upward. A cross-pin in the top of the trigger retains the trigger pin plunger and spring. These are not removed in normal takedown.

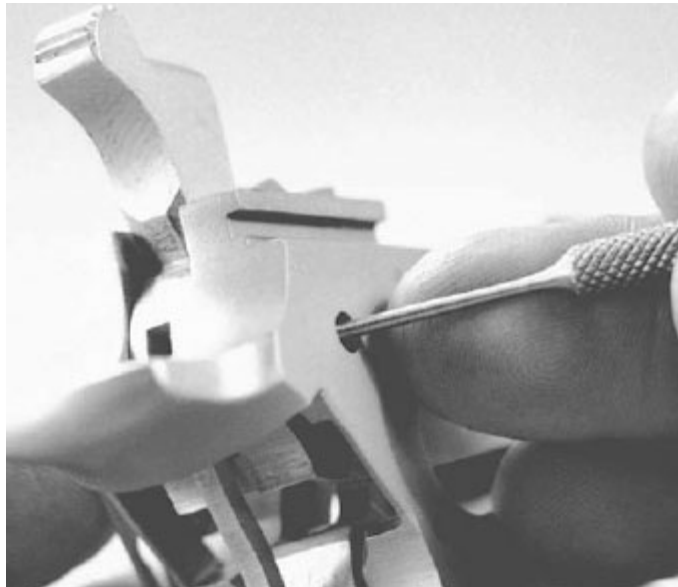
Reassembly Tips:

When replacing the trigger assembly, insert a small tool to insure that

the small tip of the trigger spring plunger enters the hole in the front of the trigger bar.



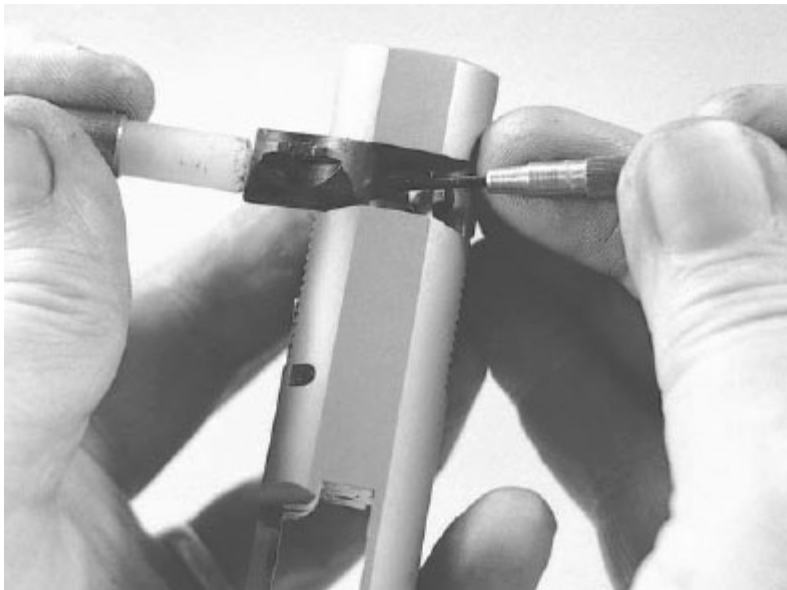
1. Position the hammer, sear, and ejector, and the two levers on the right in the frame, then push the sideplate bearing the hammer and sear pivots into place.



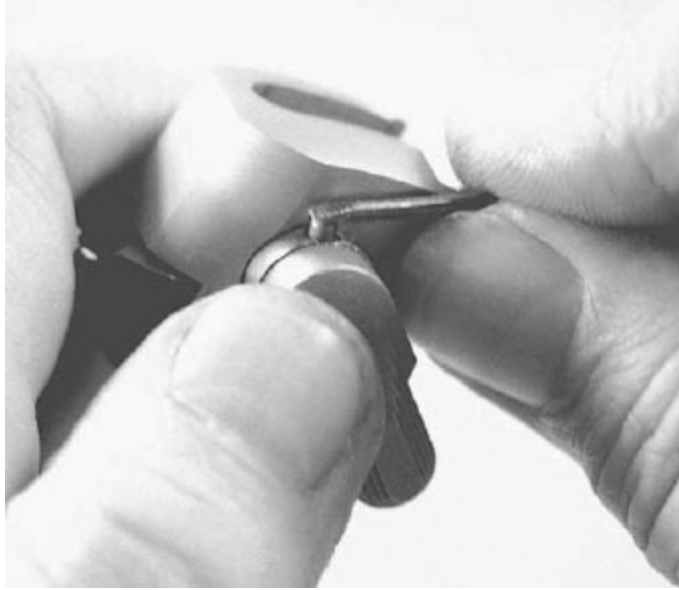
2. A small tool can be used to guide the firing pin block lever and the sear trip into place as the pivot is pushed across.



3. When pushing the grip piece back into place, be sure the hammer spring plunger is properly aligned.



4. When installing the rear sight, use a tool to keep the springs vertical as the sight is pushed into place, to avoid deformation of the springs.



- 5.** When replacing the safety system, use a tool to depress the positioning plunger as the safety is pushed into place.



- 6.** As the slide is pushed back onto the frame, the three small levers at the rear of the frame must be depressed to clear the slide.

Smith & Wesson Bodyguard 380



Data: Smith & Wesson BG380

Origin: United States

Manufacturer: Smith & Wesson,
Springfield, MA

Cartridge: .380 Auto

**Magazine
capacity:** 6 rounds

Overall length: 5.25 inches

Height: 4.15 inches

Barrel length: 2.75 inches

Cartridge: 11.85 ounces

In 2011 S&W introduced two subcompact pistols with the bodyguard name. The first was a small 38 Special revolver which came from the factory with a laser mounted on the right side above the cylinder. Both this revolver and the bodyguard 380 semi auto pistol had frames made from polymer, both are double action only, and are quite small. The Bodyguard 380 also has a laser integrated fully into the frame under the barrel in front of the trigger guard. This is the first gun mass-marketed to the public with a laser that is part of the whole rather than an accessory, and even better at a street price of under \$400 making it a very affordable firearm with perks included. This gun is a very viable deep concealment pistol or can be used commonly as a back-up. Smaller than the palm of the average man's hand and holding six rounds of .380ACP, it is easily disassembled and maintained.

Field Strip:



1. With the slide locked open and the magazine released, rotate the takedown lever until it points down where it will disengage from its retaining spring. This may require a moderate amount of force. This should allow it to be pulled out to the left side.



2. Pull the slide forward off the front of the frame.



3. Remove the recoil spring assembly by lifting it up at the back.
Caution: *The dual springs on the guide rod are not captive. Control the assembly when removing it.*



4. Remove the barrel by lifting it up and pulling it to the rear.



Smith & Wesson Bodyguard 380 field stripped

Detail Strip:



5. Drive out this roll pin from the bottom to remove the extractor and extractor spring.



- 6.** Remove the rear sight by drifting it from the left to the right. The small oval plate beneath the rear sight can be removed, and beneath it is a firing pin safety and spring. These can now be removed.



7. The firing pin is held in by a blind pin which can be removed by lightly tapping the right side of the slide against a plastic bench block. Once the pin falls out, the firing pin and firing pin spring can be removed from the back of the slide. **Note:** Hitting the slide too hard against the bench block could bend the slide.



8. To remove the receiver from the polymer frame, drive out the two large roll pins, one of which is in front of and above the trigger and the other is at the very rear of the frame. This will remove tension from the hammer. Control the receiver as it is removed.



- 9.** Once the receiver is freed from the pistol grip, the slide stop can be removed by lifting up on it and pulling it straight out to the side. The safety lever is retained by the rear pin just removed.



- 10.** At this point, the slide stop can be removed as well as the hammer spring. The small spring indicated in the photo is the

safety spring and is staked in place. Do not remove unless necessary.



- 11.** The trigger return spring on the right side also lifts the connector bar. The connector bar will easily fall away releasing the spring which can then be pulled straight out from the trigger.



12. Pushing out this pin to the right will release the trigger which can be pulled straight out the bottom.



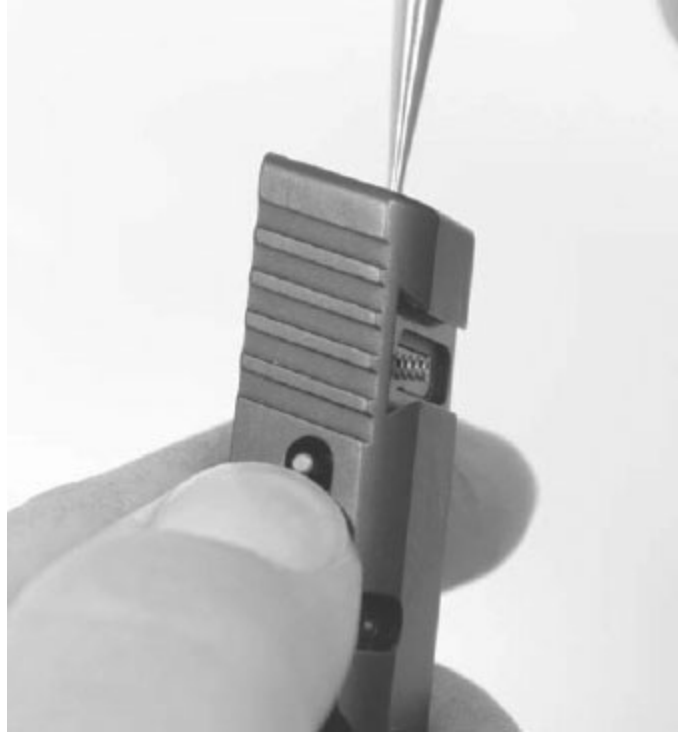
13. Pushing out the hammer pin will release the hammer, firing pin

safety lever, and ejector.



- 14.** Remove the magazine catch spring by hooking it and lifting it straight up out of its slot. The magazine catch can now be removed by pushing it out to the right.

Reassembly Tips:



1. When reinstalling the firing pin, the firing pin will have to be depressed slightly in order to install the firing pin retaining pin. Simply place the firing pin into its channel with a flat at the rear facing upward. Use the firing pin safety to hold it in place. Insert the firing pin retaining pin into its hole on the right side putting gentle pressure on it as you push in the firing pin from the rear. This will allow the firing pin retaining pin to be pushed fully back into place.



- 2.** Note the flange grooves in the trigger. When reinstalling the trigger into the receiver, make sure the three flanges on the trigger pin line up with the corresponding slots in the trigger.



- 3.** The loop on the trigger spring fits into a slot inside the hole in the trigger pin. Be sure to align it with the long leg of the spring

pointed up and to the front.

Smith & Wesson Sigma

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Smith & Wesson Sigma also apply to the following guns:

Sigma SW9C

SW40F

SW9V

SW40C

SW9M

SW40V



Data: Smith & Wesson Sigma SW9F

Origin: United States

Manufacturer: Smith & Wesson, Springfield,
Massachusetts

Cartridge: 9mm Luger

Magazine capacity: 10 and 17 rounds

Overall length: 7 5/8 inches

Height 5 5/8 inches

Barrel length: 4 1/2 inches

Cartridge: 26 ounces

The original full-sized SW9F shown here was introduced in 1994. It was soon superseded by smaller and lighter versions, and 40 S&W chambering is also offered. Beautifully engineered, the Sigma is ergonomically superior to several other polymer-frame pistols.

Field Strip:



1. With the magazine removed and the striker in fired position, move the slide very slightly toward the rear, and pull downward on the serrated wings of the takedown latch.



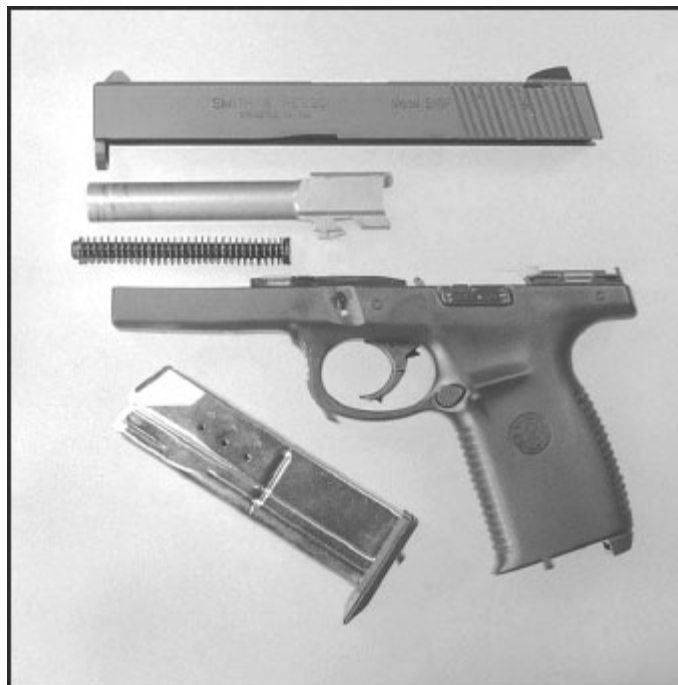
2. While holding the latch down, move the slide and barrel assembly off the frame toward the front.



3. Lift the rear end of the recoil spring unit away from the front of the barrel underlug, and take it out. The recoil spring unit is not routinely disassembled.



4. Lift the barrel slightly and move it forward to clear the extractor, then tilt it outward and remove it toward the rear.

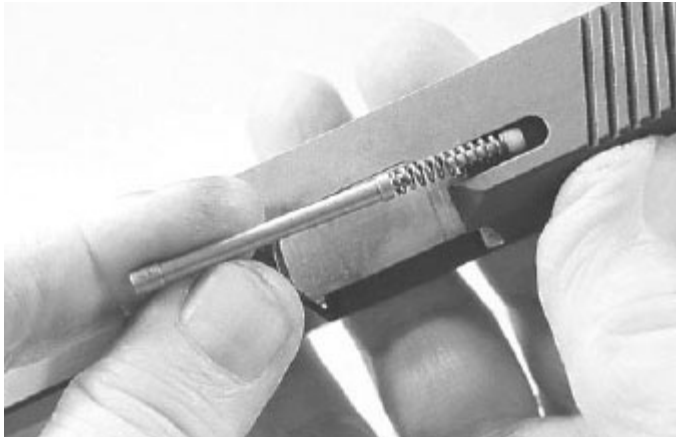


Smith & Wesson Sigma field-stripped

Detail Strip:



- 5.** Insert a small, sharp screwdriver between the extractor and its plunger, and turn the tool to nudge the extractor outward and forward. While this is done, use a thumbnail to depress the striker block. Control the extractor as it emerges.



- 6.** Remove the extractor plunger and spring assembly.



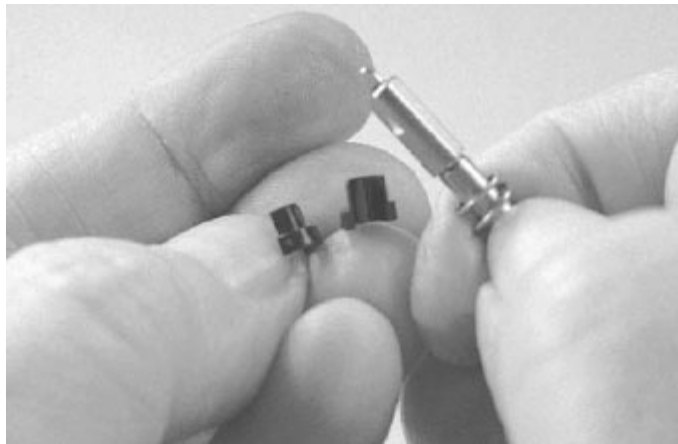
- 7.** Move the striker slightly toward the rear, and take out the striker block and its coil spring.



- 8.** Use a tool to depress the striker sleeve forward, and remove the slide endpiece.



9. Remove the striker assembly.



10. Pull back the striker spring, and remove the two halves of the spring retainer. Take care that these very small parts are not lost.



11. Remove the spring and sleeve from the striker.



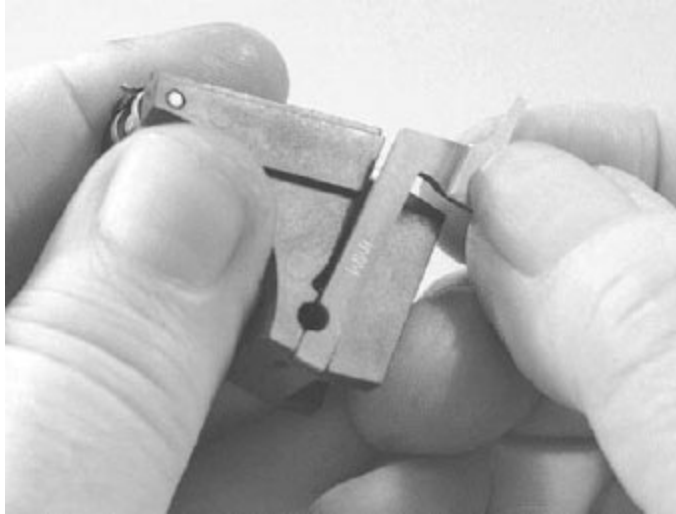
12. The rear sight can be drifted out of its dovetail for removal. The front sight is heat-staked in place, and it is not removed in normal takedown.



13. Push out the cross-pin at the rear of the frame.



14. Move the sear housing upward, then tilt it to disengage the trigger bar, and remove the sear housing. It may be necessary to pry the housing gently at the rear to start it out.



15. Lift the ejector out of its recess.



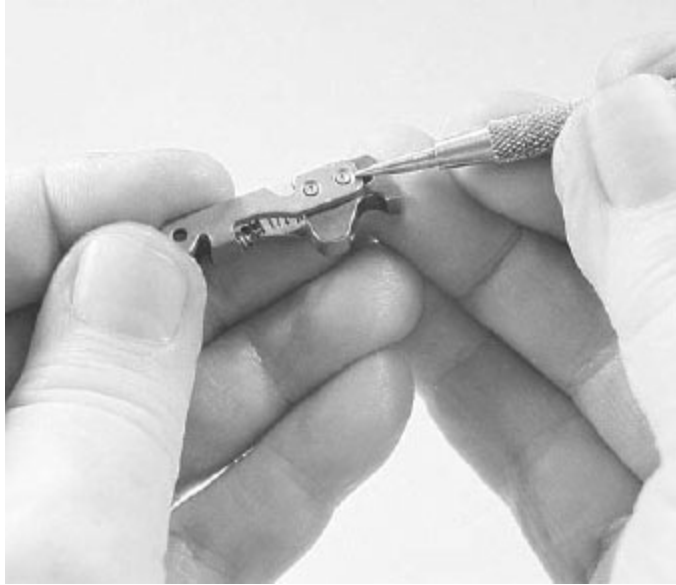
16. Push out the cross-pin in the lower end of the sear housing.
Control the spring as it is released.



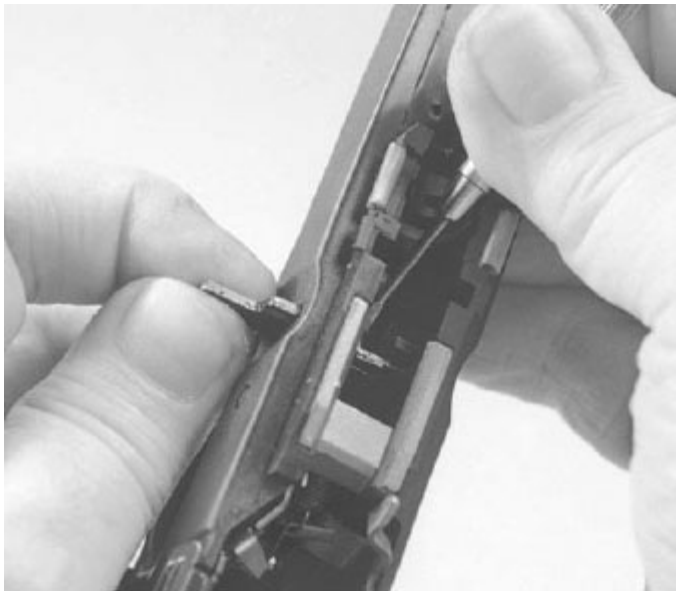
17. Remove the sear lever spring.



18. Tip the lower end of the sear lever out toward the rear, and remove the sear and lever assembly upward and forward.



- 19.** The cross-pins mating the sear to the lever are factory-riveted in place, and are not routinely removed. If the sear spring needs to be taken out, it can be nudged off its post in the lever for removal.



- 20.** Depress the takedown latch spring, and remove the latch toward either side.



21. Remove the takedown latch spring.



22. Push out the locking block and trigger cross-pin.



23. Remove the slide latch and its attached spring. The spring is crimped in place on the latch, and is not routinely removed.



24. Use a tool to gently lift the locking block, and remove it.



25. Move the trigger assembly out upward.



26. The combination trigger and trigger bar spring is easily unhooked from the bar. The larger of the two cross-pins in the trigger retains the trigger bar. Drifting out the smaller pin will allow removal of the trigger safety extension and its spring. In normal takedown, these are best left in place.



27. There is no way to photograph the interior of the magazine well, to detail removal of the magazine catch. A tool with a long shaft and a small L-shaped end is required. The catch is depressed and the torsion spring held in that position. The catch is then moved back to align an exit opening with the tip of the spring, and the spring is flexed out rearward to release the catch for removal toward the right. The spring can then be drifted out upward. In normal takedown, this system is best left in place.

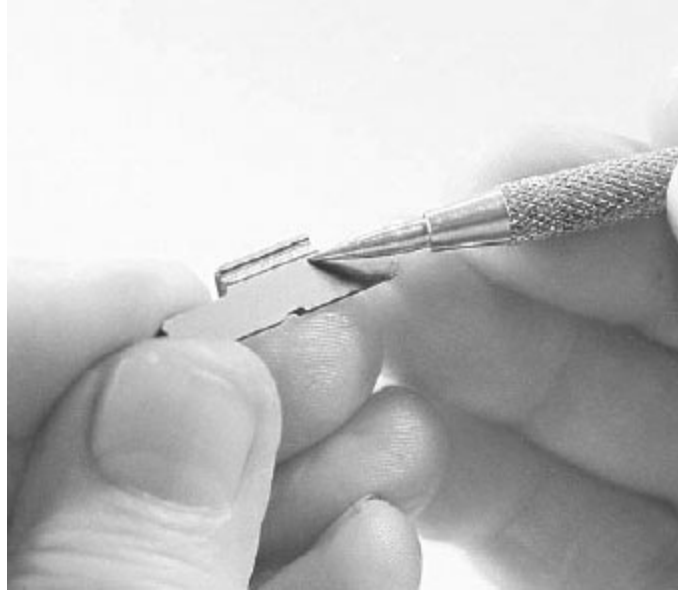
Reassembly Tips:



1. Installation of the locking block and trigger assembly will require the use of a slave pin, as near as possible to the size of the cross-pin, and just long enough to span the locking block, as shown.



2. Note that the spring groove in the trigger pin is off-centered. Install the pin so the groove is toward the left side of the frame.



- 3.** When installing the takedown latch, note that the cross-groove at its top goes toward the rear.



- 4.** When installing the slide endpiece, first put the extractor and its spring and plunger assembly in place. Depress the striker sleeve, and move the endpiece up to the rear tip of the extractor plunger. With the slide firmly supported, depress the plunger and slide the endpiece up into place. Note: It is possible to initially remove the endpiece without first taking out the extractor

system, but the spring tension makes this difficult.

Smith & Wesson M&P



Data: Smith & Wesson M&P

Origin: United States

Manufacturer: Smith & Wesson, Springfield,
Massachusetts

Cartridge: 40S&W, 357SIG, 9x19mm

Magazine capacity: 15 rounds (40S&W)

Overall length: 7½ inches

Height: 5½ inches

Barrel length: 4¼ inches

Cartridge: 24.25 ounces

The “M&P” designation translates to “Military & Police,” a name long associated with a classic Smith & Wesson revolver. Introduced in 2006, the M&P is the S&W entry in the field of “duty” sidearms for professionals. It has numerous innovative design touches, and it should do well in that role.

Field Strip:



1. Remove the magazine. At lower rear of the grip frame there is a takedown tool that is removed by giving it a quarter-turn, then pulling it out. In some pistols, this may be difficult. Removal of the tool will also release the backstrap piece.



- 2.** Pull the slide back and operate the slide latch to lock it open. With the tool provided, or any tool, tip the sear deactivation lever over into the magazine well. The lever is inside, just to the left of the magazine safety lever, and it has two angle bends. If the pistol is fairly new, the lever will be painted yellow.



- 3.** Turn the takedown lever down to the position shown.



4. Restrain the slide, release the slide latch, and move the slide and barrel assembly off the frame toward the front.



5. Detach the recoil spring unit from the barrel lug, and remove it. Disassembly of the spring unit is not advisable.



6. Remove the barrel from the slide.



Smith & Wesson M&P field-stripped

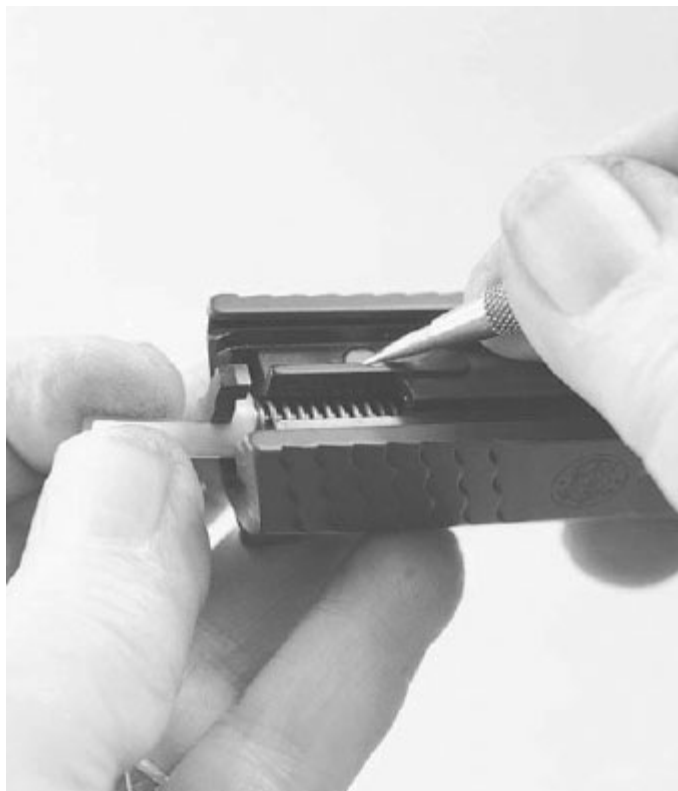
Detail Strip:



7. To release the slide backplate for removal, insert a tool to push the white polymer lockpiece forward.



8. While holding the lockpiece in forward position, move the backplate downward for removal.



9. Depress the striker block, and remove the striker assembly toward the rear.



10. The striker assembly can be taken apart by drawing back the spring and removing the two halves of the spring collar at the front. **CAUTION:** *Control the spring. This should be done only for repair.*



- 11.** The striker block and its coil spring are accessed only by removal of the rear sight. If the striker block is taken out, there is a polymer sleeve in the striker tunnel that can be nudged out rearward.



- 12.** Both sights are dovetail-mounted. The rear sight is secured by an Allen screw. Except for repair, removal is not advisable.



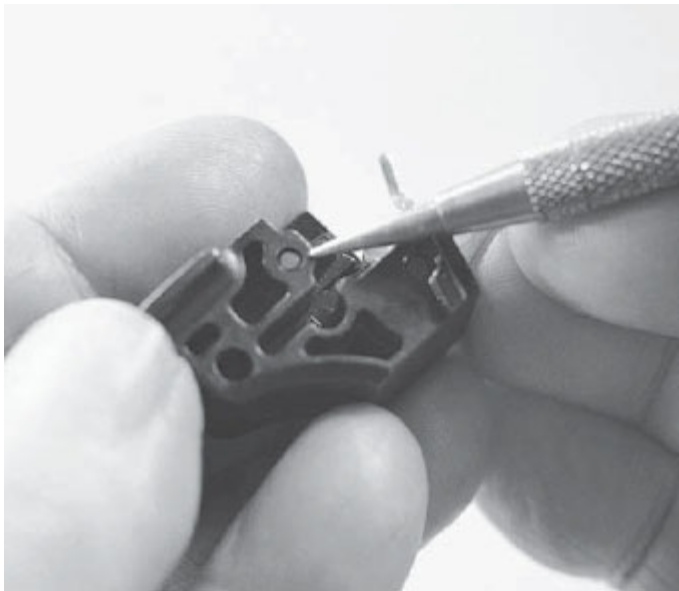
- 13.** Drifting out the vertical pin will allow removal of the extractor and its coil spring.



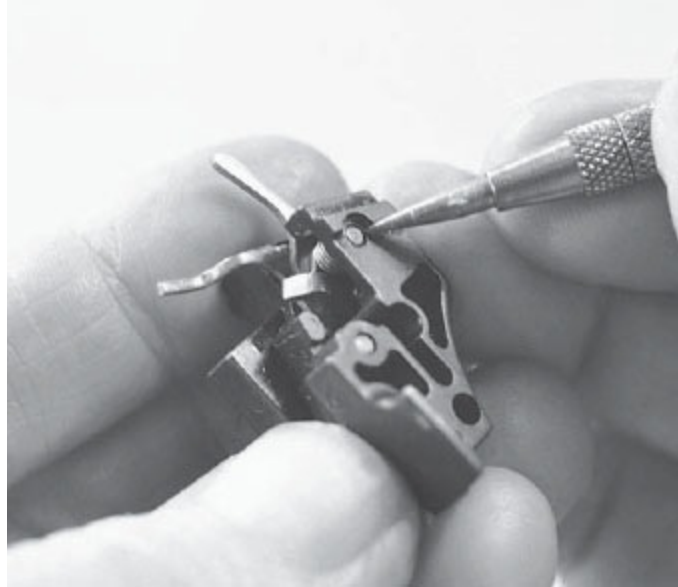
- 14.** With a proper roll-pin drift punch, drive out the cross-pin at the upper rear of the grip frame.



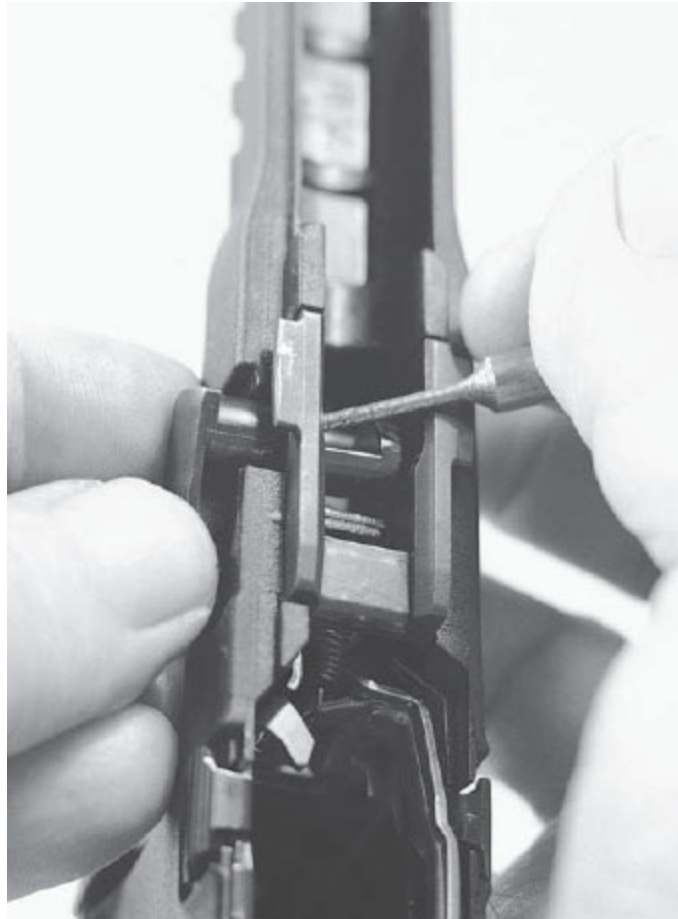
- 15.** After the pin is removed, gently pry the rear sub-frame upward. As it clears the frame, the ejector can be detached from the left side.



- 16.** Pushing out this cross-pin will allow removal of the sear and its plunger and spring. **CAUTION:** *The plunger and spring are very small and easily lost.*



- 17.** Pushing out the cross-pin at lower front will free the magazine safety and the sear deactivation lever, and the attendant torsion spring. **CAUTION:** *The torsion spring will be released, so control it.* The key-lock in this unit should not be disturbed.



18. Nudge the takedown lever outward toward the left, and turn it for removal.



19. Drift out the front roll-cross-pin.



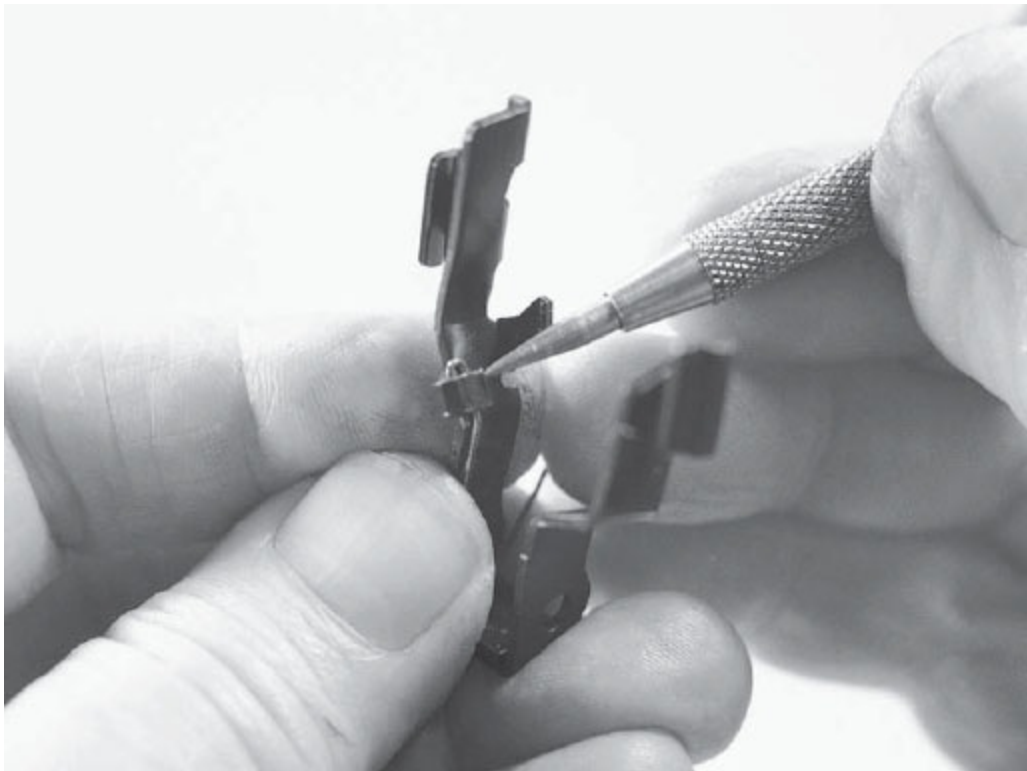
20. Drift out the trigger pin toward the left.



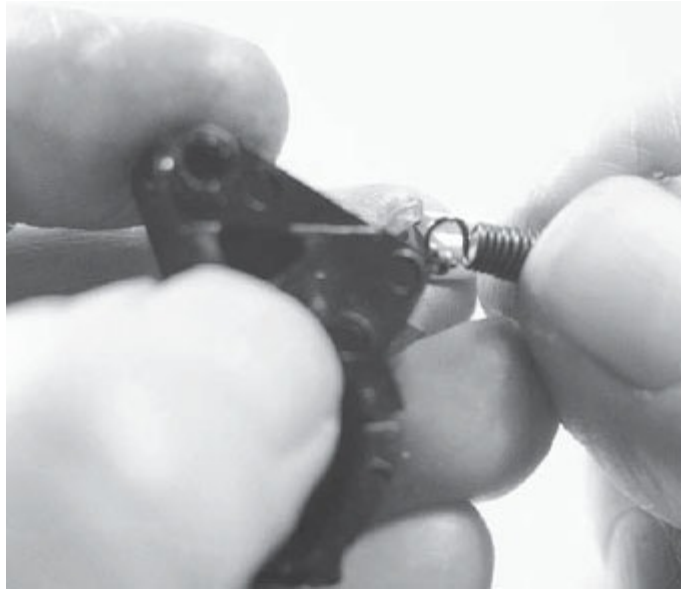
- 21.** Gently pry the front sub-frame out upward. As it clears on the left side, remove the takedown lever tension spring. It is very small, and easily lost.



22. Lift out the trigger assembly. The slide latch is easily detached toward the front.



- 23.** The slide latch spring is crimped in place, and removal should be done only for repair.



- 24.** The trigger spring can be taken off by turning it over to the rear and unhooking it from its tab on the trigger bar.

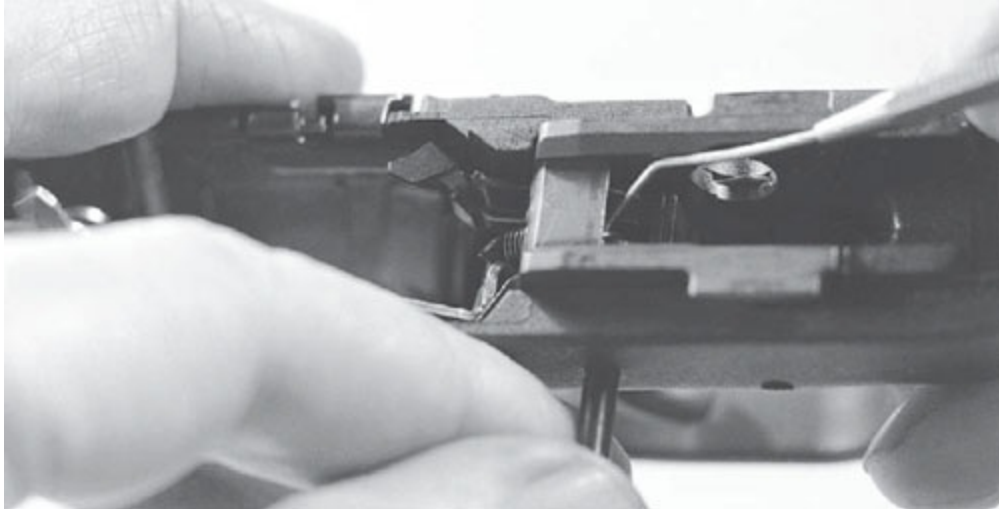


- 25.** The trigger bar can be removed by drifting out this pin. The smaller pin, below, retains the trigger safety and its spring.



26. It's not possible to photograph this, inside the magazine well. Use slim pliers to move the torsion spring out of its notch in the magazine catch, and remove the catch. This is also the procedure if the catch is to be reversed.

Reassembly Tips:



1. As the trigger assembly is re-installed, it will be necessary to insert a hooked tool to re-engage the loop of the trigger spring with the cross-pin.



- 2.** Note that the takedown lever has a step on its right end to allow compression of the tension spring by turning the lever. Also note that the left tip of the front roll-pin should be even with the frame surface, as shown.



- 3.** As the rear sub-frame is installed, be sure the rear tip of the trigger bar is in its recess.

Springfield XD



Data: Springfield XD

Origin: Croatia

Manufacturer: HS Produkt, Karlovac

Cartridge: 9x19mm, 40S&W, 357SIG, 45
Auto, 45GAP

Magazine 15 rounds (9mm)
capacity:

Overall 7 inches
length:

Height: 5.37 inches

Barrel length: 4 inches

Cartridge: 23 ounces

The Springfield XD (“X-treme Duty”) was introduced in 2002. In addition to the Service model shown here, it is also offered in a Tactical version with a 5-inch barrel, and in a 3-inch Sub-Compact model. There are five caliber options, and different frame colors are available.

Field Strip:



1. Lock the slide open, remove the magazine, and turn the takedown lever up to the vertical position.



2. Restrain the slide, release the slide latch, and ease the slide forward to its normal position. Pull the trigger to drop the striker to fired position, and move the slide and barrel assembly forward off the frame.



3. Detach the recoil spring unit from the barrel lug, and remove it.

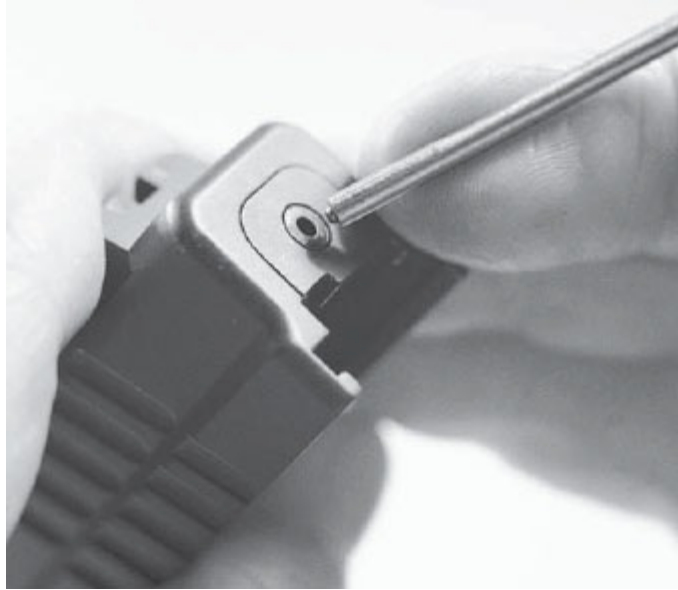


4. Remove the barrel from the slide.



Springfield XD field-stripped

Detail Strip:

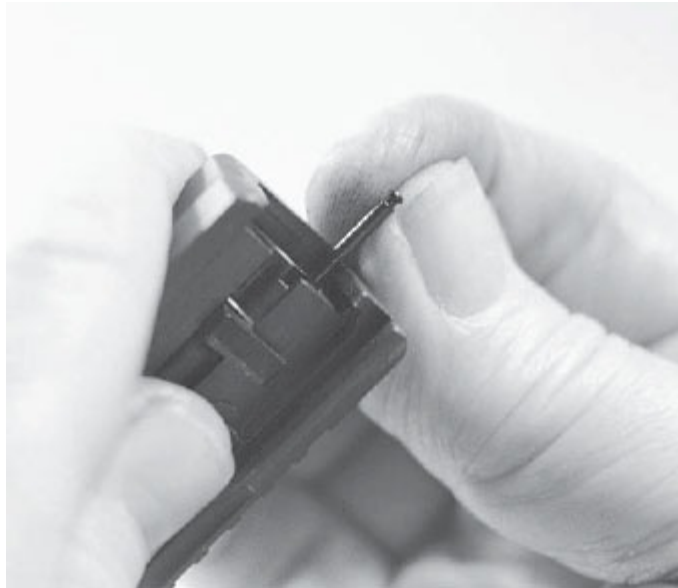


5. A roll-pin drift punch is the perfect tool for depressing the plunger that retains the slide backplate.

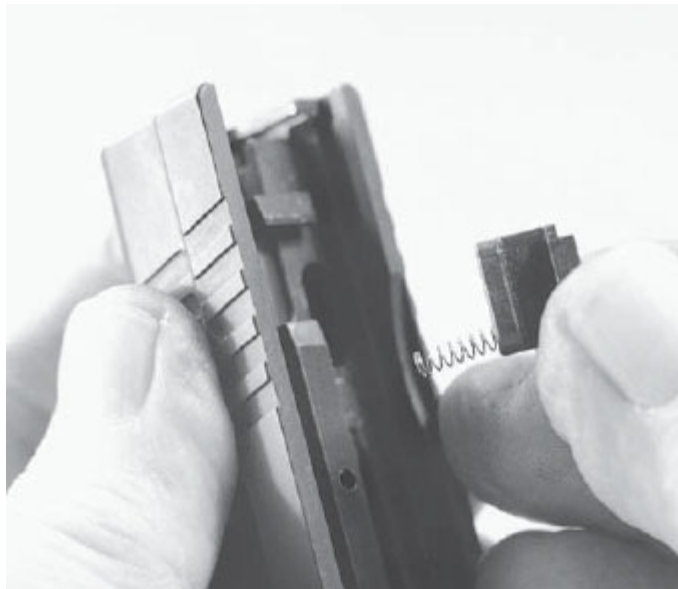


6. As the plunger is depressed and the backplate is removed downward, restrain the powerful striker spring and ease out the plunger and spring. The guide/indicator is taken out with these

parts.



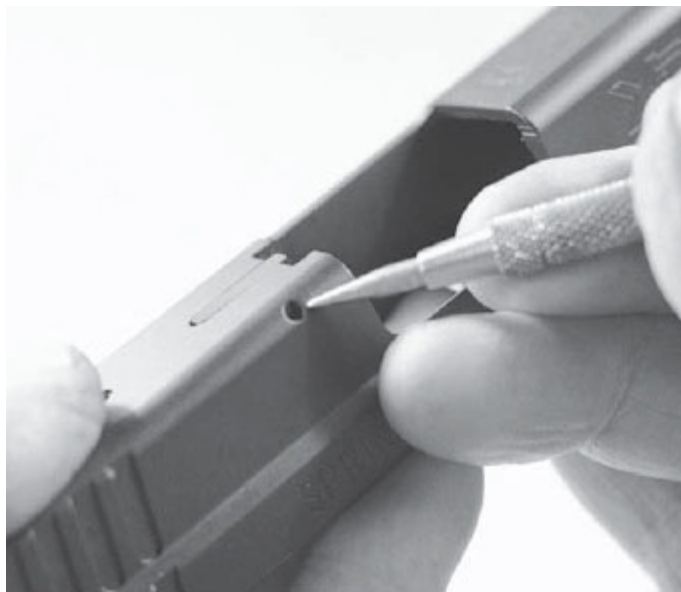
7. Restrain the striker block, and pull out the small retaining pin toward the rear.



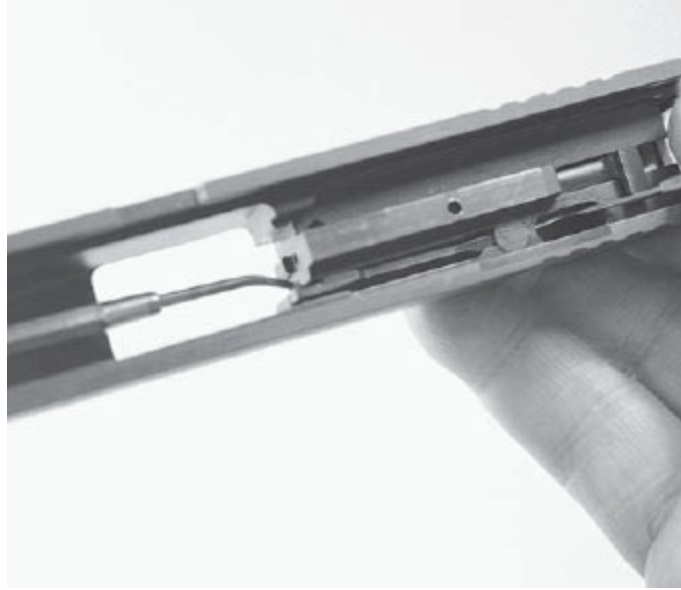
8. Remove the striker block and its coil spring.



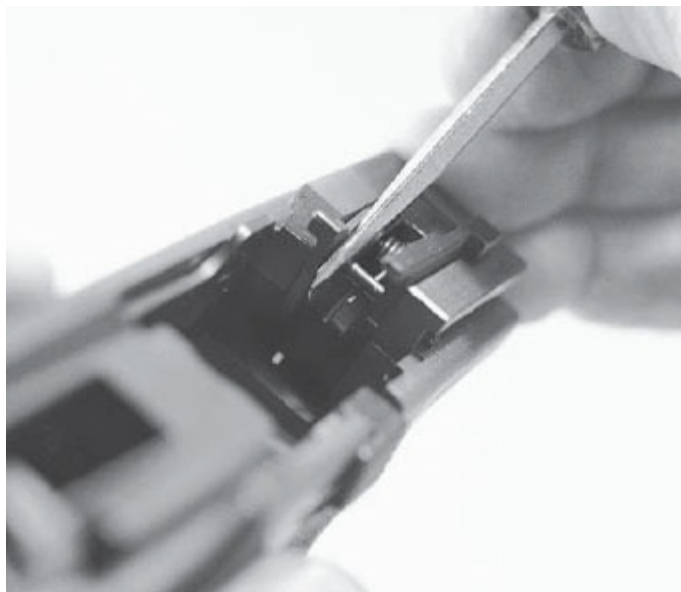
- 9.** If removal of the striker and its rebound spring are necessary for repair, there is an access hole in the underside of the slide to allow this rollpin to be drifted out upward. The striker and its rebound spring are then taken out rearward. Also note that both sights are dovetail-mounted and can be driven out, if necessary.



- 10.** If the loaded-chamber indicator and its coil spring have to be removed, drifting out this cross-pin will release them.



- 11.** The front tip of the pin that retained the striker block also anchored the extractor. If its removal is necessary, it must be worked out with lifting pressure at both ends, with a hooked tool at the rear and a sharp flat one at the front. Except for repair, leave it in place.



- 12.** To remove the sear, first insert a wedge-shaped tool, such as a small screwdriver, between the striker block lever and the end of the bearing pin for the sear spring, to nudge the pin leftward.

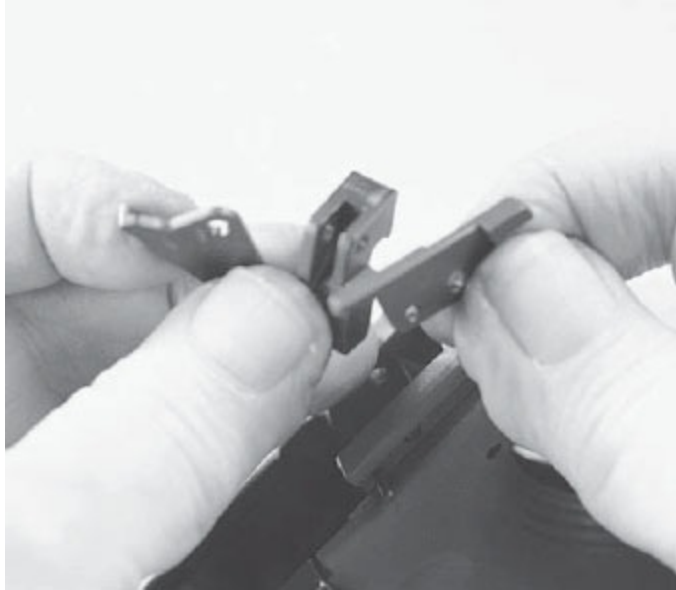
Free the spring, and ease it over to the rear.



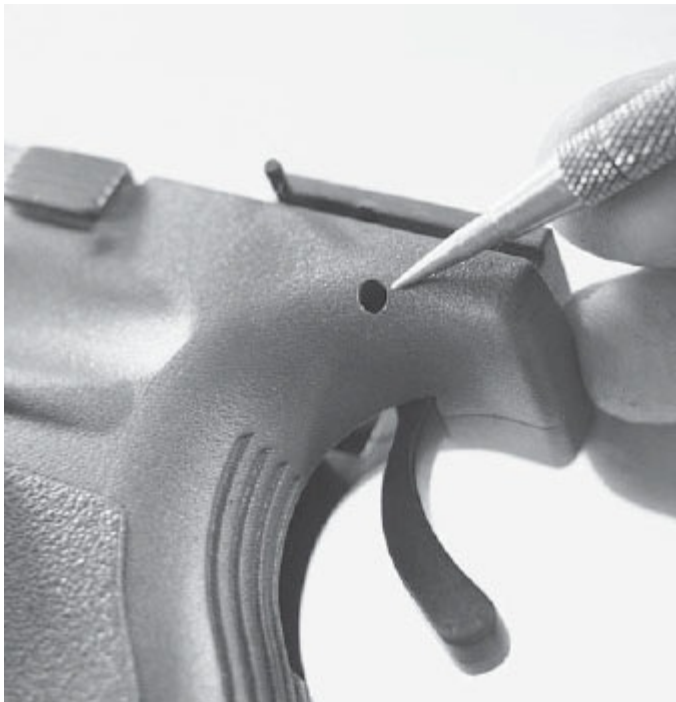
13. Drift out the sear cross-pin.



14. As the drift is removed, take out the sear spring and the sear.



- 15.** With the sear spring pin all the way to the left side, the ejector and striker block lever, along with the sear, can be removed.



- 16.** Removal of the other parts will allow the grip safety to swing outward, partially relieving its spring tension. Even so, control the torsion spring as you drift out the grip safety pin.



17. Turn the takedown lever to the position shown, and remove it.



18. Drift out the sub-frame cross-pin.



19. Drift out the trigger cross-pin.



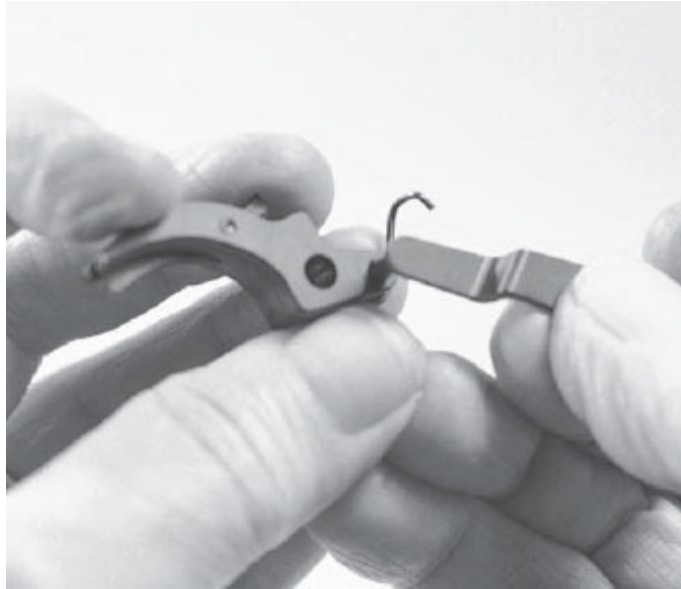
20. Remove the slide latch.



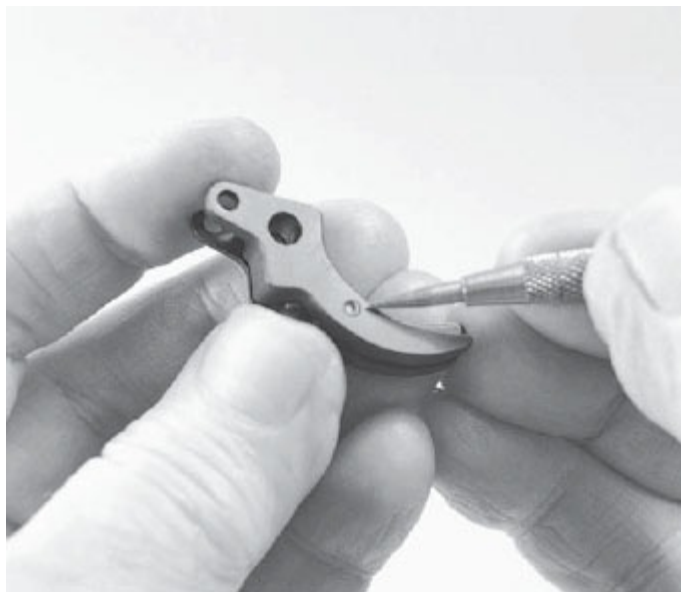
21. Remove the sub-frame upward. As the slide latch spring clears on the left side, remove it so it won't be lost.



- 22.** Move the rear of the trigger bar slightly inward, and take out the trigger assembly upward.



- 23.** Separating the trigger bar from the trigger will free the trigger spring for removal.



- 24.** Drifting out this pin will allow the trigger safety and its spring to be taken out. However, note that the pin is staked in place on both sides, so some damage is possible. Do this only for repair.

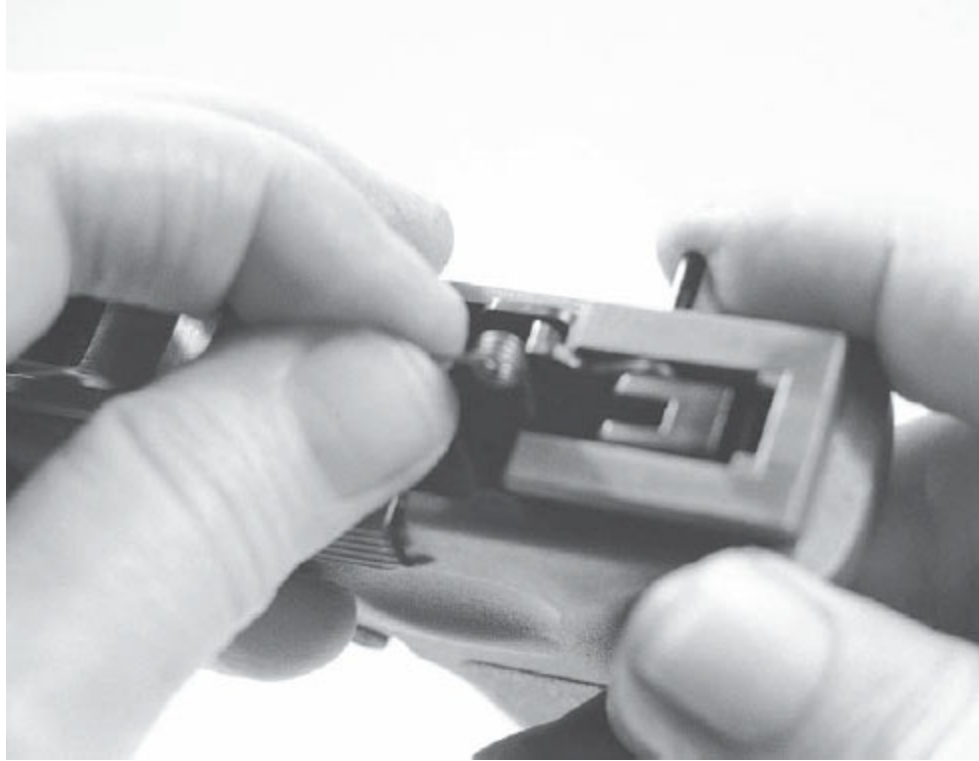


- 25.** Drifting out this cross-pin will release the magazine catch and its torsion spring inside the magazine well. The magazine release button can then be taken out either side. If this is done, restrain the catch inside the well as the drift is removed.

Reassembly Tips:



- 1.** The right tip of the takedown lever shaft has a step that allows compression of the tension spring by turning the lever as the shaft is re-inserted.



- 2.** Reassemble the rear firing system parts one at a time. Push the pin slightly in, and install the striker block lever. Put in the sear, and push it further, and so on.

Star PD



Data: Star Model PD

Origin: Spain

Manufacturer: Bonifacio Echeverria, S.A.,
Eibar

Cartridge: 45 Auto (45 ACP)

Magazine 6 rounds
capacity:

Overall length: 7 inches

Barrel length: 3.94 inches

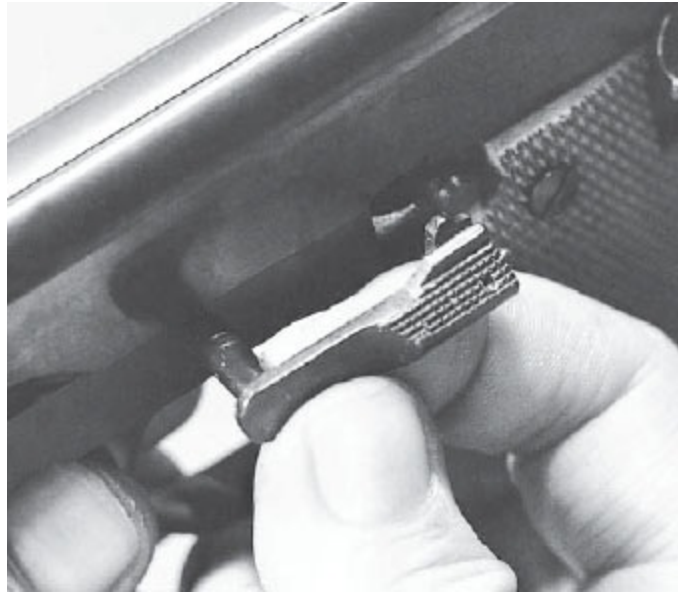
Cartridge: 25 ounces

One of the two smallest automatics in 45 ACP, the PD is the lightest in this caliber and the only one in its class with fully adjustable sights. As with the other Star centerfire pistols, it is a redesign of the basic Colt/Browning Model 1911 style, with an entirely different internal mechanism. The manual safety is particularly outstanding, as it directly blocks the hammer when applied. Like all Star pistols, the Model PD is of high quality in both materials and workmanship.

Field Strip:



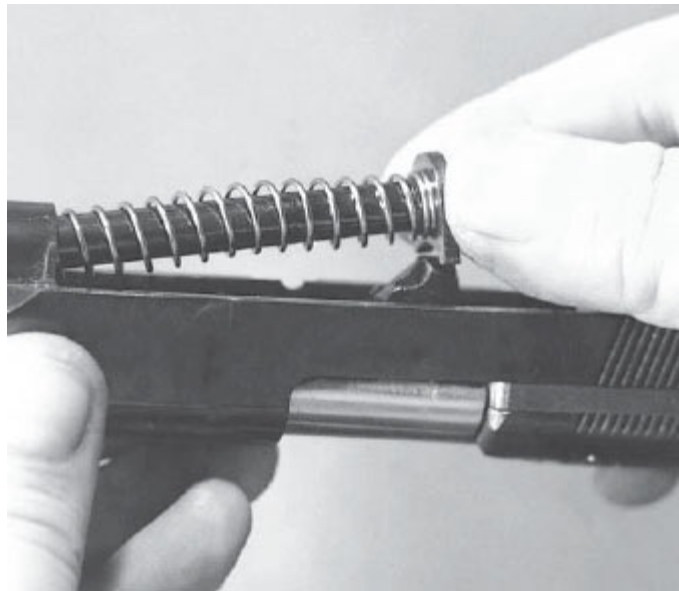
Remove the magazine and lock the slide open by swinging the manual safety up into its forward recess.



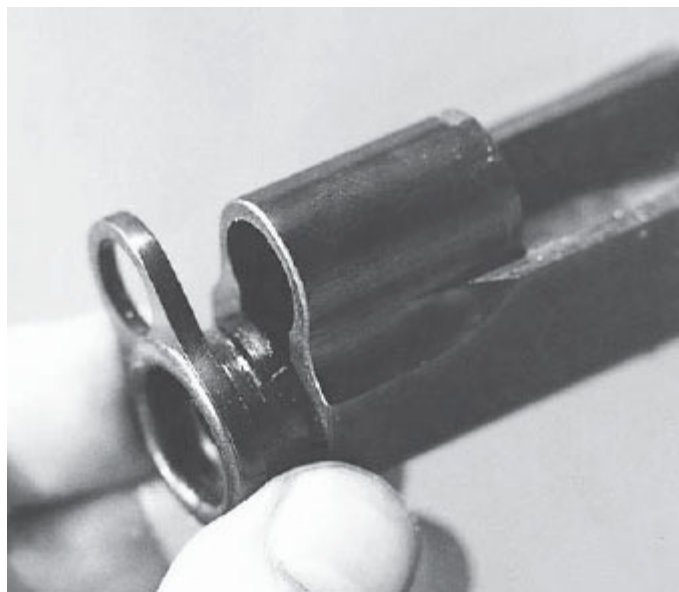
Start the slide-latch out by pushing on the end of its cross-shaft on the right side, and remove the latch to the left.



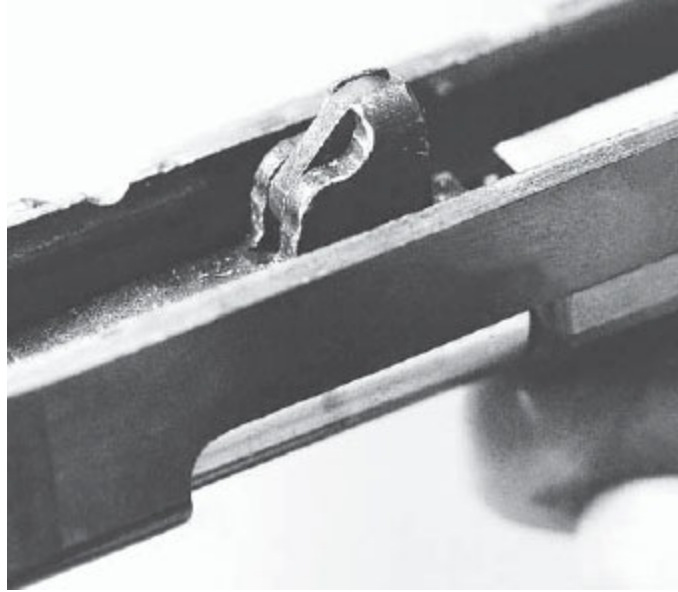
Holding the slide against the tension of the recoil spring, release the safety and run the slide assembly toward off the frame.



Lift the recoil spring guide at the rear, and take out the guide and spring toward the rear of the slide.



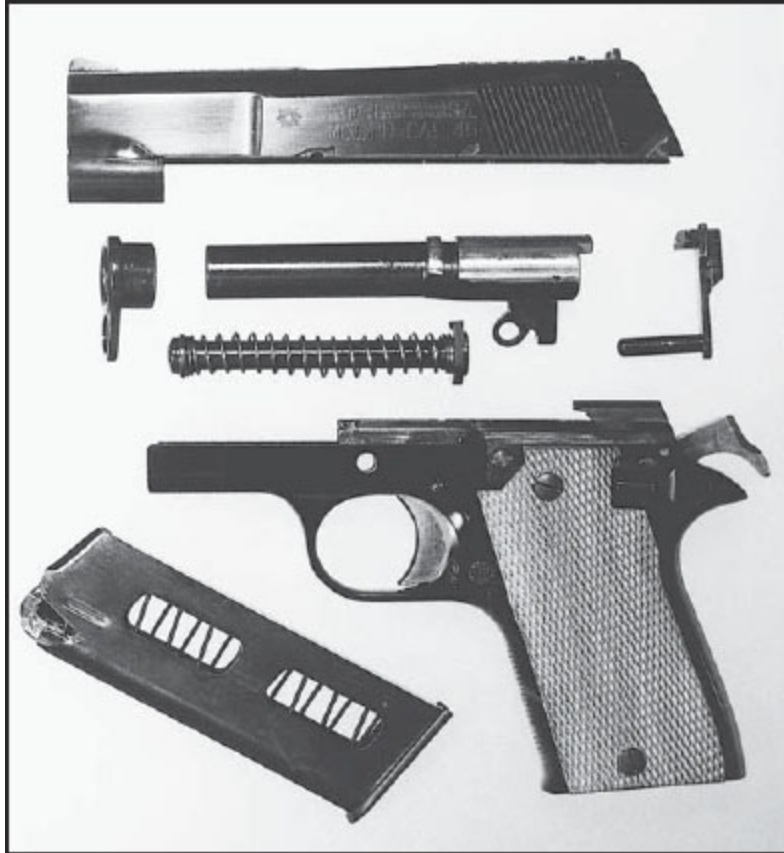
Turn the barrel bushing to the left side of the slide until its lug aligns with the open track in the slide underlug, and remove it toward the front.



With the barrel link tipped either back, as shown, or fully forward, move the barrel toward the front of the slide.



Withdraw the barrel from the front of the slide. **Gun is now field-stripped.**

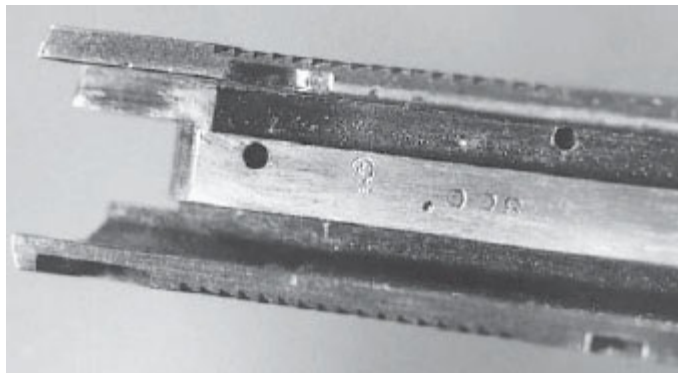


Star PD field-stripped

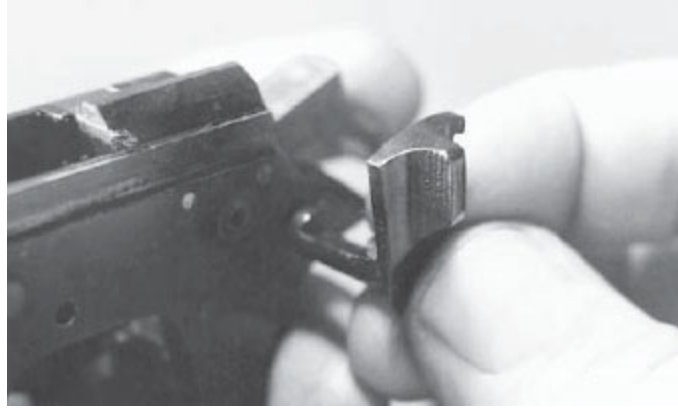
Detail Strip:



After removal of the elevation screw, the rear sight is depressed at the front and slid out toward the rear.



After the rear sight is removed, the firing pin retainer can be pushed out from the underside, through the hole shown at left in this photo. Drifting out the pin in the hole at right from bottom to top will release the extractor and its spring.



Holding the hammer back as far as it will go, turn the safety-lever up to the position shown and withdraw it to the left. **CAUTION:** *Take care to restrain the safety spring and plunger, mounted in the hammer pivot, as these will be released as the safety is turned up.*



Remove the safety plunger and spring from the hammer pivot.



The hammer pivot is drifted out from right to left. **CAUTION:** *Spring is compressed, ease it out, along with its plunger.* The small pin at the lower rear of the grip frame retains the flat sear spring. The pin at the lower right of the hammer pivot retains the sear, and the pin at the upper right of the hammer pivot holds the ejector and its base. The magazine release and its retainer and spring are removed in the same manner as on our Model 1911 pistol (q.v.). The trigger is retained by a cross-pin and is removed toward the rear, along with its connector bar. Spring the connector bar slightly out to clear the frame as the trigger is moved rearward. After the trigger is removed, the disconnecter can be slid down and off.

Reassembly Tips:

When replacing the hammer spring and the follower in the grip frame, it can be pushed down with a tool until its tip is seen in a large hole at the lower rear of the grip frame, and a paper clip or small pin can be inserted in the cross-hole in the lower tip of the follower to hold it in place while installing the hammer. This can also be used in disassembly, especially if removal of the mainspring is not desired. This is a strong spring, so take care when compressing or releasing it.

When replacing the safety-lever in the frame, turn it down until its edge is just beside the spring and plunger, depress the plunger, and move the safety over it. Take care that it is not released accidentally, as it is small and can travel quite a distance.

When installing the recoil spring and guide, be sure the barrel link is tipped toward the rear.

When replacing the slide-latch, insert it thorough the frame and barrel link before retracting the slide and locking it open with the safety, then partially withdraw the latch, position it over its rear opening, and push it in.

Steyr Model GB



Data: Steyr Model GB

Origin: Austria

Manufacturer: Steyr-Mannlicher GmbH,
Steyr, Austria

Cartridge: 9x19mm (9mm Luger)

Magazine 18 rounds
capacity:

Overall 8¼ inches
length:

Height: 5.62 inches

Barrel length: 5.37 inches

Cartridge: 38 ounces

The “GB” designation is “Gaz Bremse,” which translates as “Gas Brake.” This well describes the action, with ported gas slowing the slide opening. Another notable feature is an 18-round magazine. The Steyr GB was first made in 1981, for the Austrian military trials of that year. It passed all of the testing, but Glock had the lowest bid. The GB was then sold commercially, and was discontinued in 1988. It’s a marvelous pistol.

Field Strip:



1. With the magazine removed, turn the takedown lever to vertical position.



2. Turn the muzzle bushing to the left until it stops, and remove it toward the front.



3. Remove the recoil spring assembly.



4. Cock the hammer. Move the slide all the way to the rear, lift it at the rear, then move it forward to the point shown for removal upward.



Steyr GB field-stripped

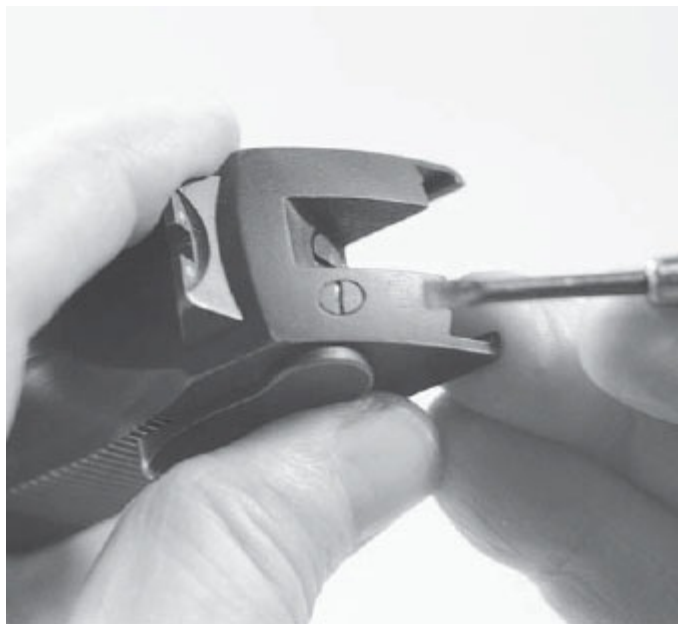
Detail Strip:



5. The recoil spring unit can be taken apart by drifting out the indicated roll-pin. This requires drawing back and locking the spring, and it is done only for repair purposes. **CAUTION:** *This is a strong spring.*

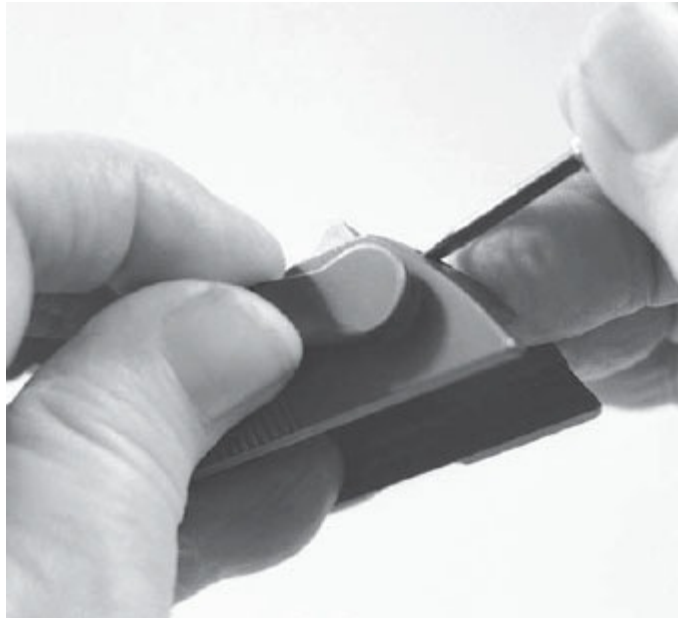


- 6.** To remove the extractor, use a small tool to depress the plunger, and tip it out. Caution: Control the plunger and coil spring, and ease them out.



- 7.** Note that the slot in the rear tip of the plunger that powers the hammer-drop lever is not a screw slot. It is there to provide a

way to push the part inward.



8. Depress the plunger, turn the hammer-drop lever to its uppermost position, and take it out. Some back-and-forth rotation may be required, and the lever can also be nudged from inside the slide. As the lever is taken out, keep a fingertip behind the firing pin, as it will be released as the lever clears.



- 9.** The firing pin and its return spring can be taken out without removal of the lever, by just moving it slightly to the left, as shown.



- 10.** As the hammer-drop lever is removed, the plunger will be released, so control it.

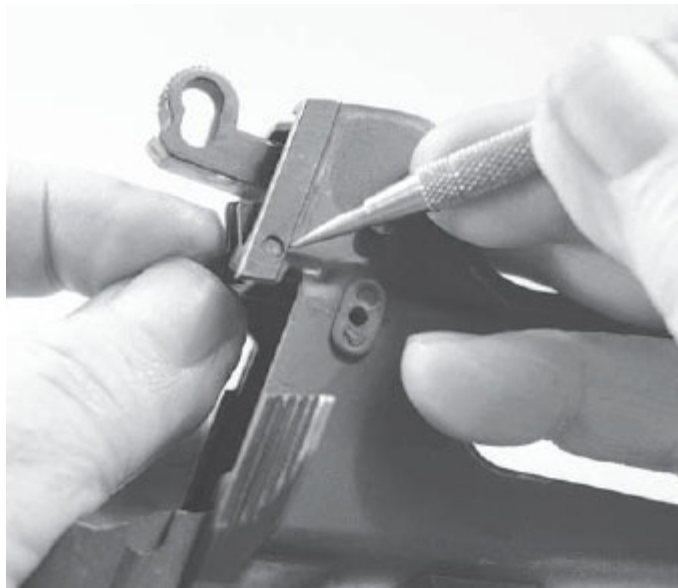


- 11.** Take out the plunger and its coil spring. Note also that the rear

sight can be drifted out of its dovetail mount, if necessary.



12. Remove the takedown lever.



- 13.** Restrain the hammer, pull the trigger, and ease the hammer down to fired position. Remove the four screws, and take off the grip panels. Push out the sear cross-pin.



- 14.** Drift out the hammer cross-pin.



- 15.** Move the sear and hammer forward for removal, turning the hammer slightly for clearance. The torsion spring that powers the

hammer and sear is easily lifted off.



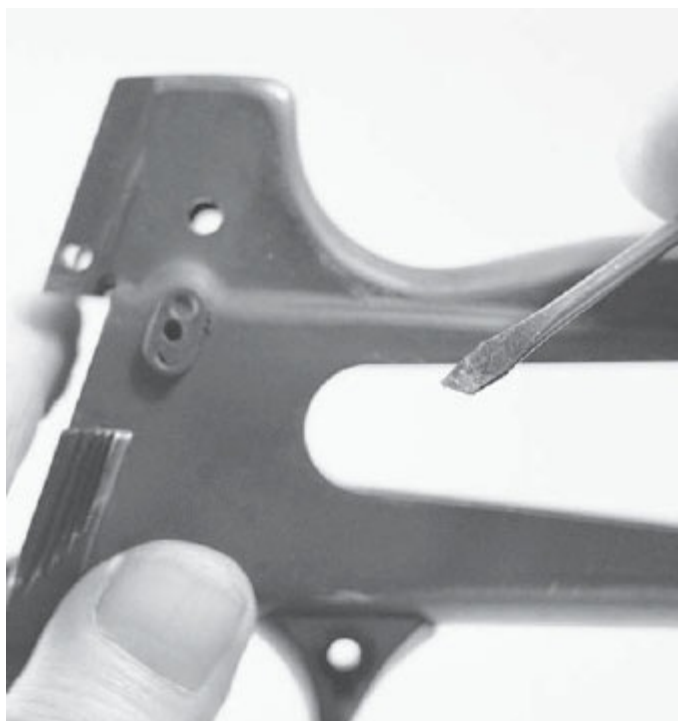
- 16.** To remove the magazine catch, depress the lock plunger and use non-marring pliers to unscrew the release button. This should be done only for repair purposes.



17. After the button is taken off, remove the spring and plunger.



18. Remove the magazine catch.



- 19.** In the front inside face of the magazine well (no photo possible) there is a screw that retains the trigger guard. An angle-tip screwdriver will be required.



- 20.** After the screw is taken out, move the trigger guard forward, then downward for removal. Note that this unit is made of polymer, so handle with care. Also, note that the guard can be taken off with the magazine catch system in place.



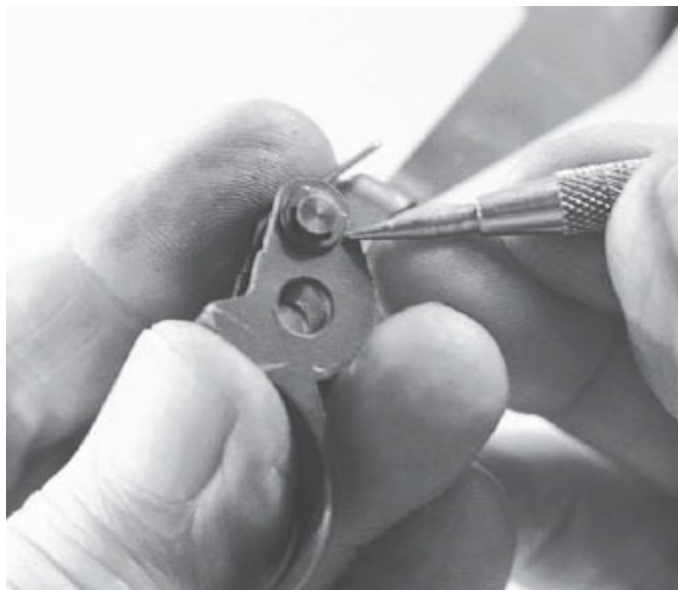
21. Use a fork-tipped tool to unhook the trigger bar spring at the rear, allowing it to swing upward and relieve its tension.



22. Turn the slide latch upward, and remove it toward the left.



23. Move the trigger assembly upward and rearward, allowing the trigger bar to go down into the magazine well, and take out the assembly.



24. The cross-shaft of the trigger bar is retained on the trigger by a spring C-clip. Removal will allow separation of the bar and the spring from the trigger. If this is done, be careful and control the

C-clip.



25. While it is possible, with a wrench of the proper size, to unscrew the barrel from the frame, this is not done in normal takedown.

Reassembly Tips:



1. When re-installing the trigger assembly and slide latch, a fork-tip tool must be used to position the left arm of the torsion spring behind the cross-shaft of the slide latch. Also, remember to re-engage the right arm of the spring with the trigger bar.



- 2.** After the hammer is re-installed, a fork-tip tool is used to re-engage the left arm of the torsion hammer spring under the left lip of the sear. The sear is then held in place for re-insertion of the cross-pin.

Steyr M9-A1

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the M9-A1 also apply to the following gun:

Steyr S9-A1

Steyr S40-A1

Steyr C9-A1

Steyr C40-A1

Steyr M40-A1



Data: Steyr M9-A1

Origin: Austria

Manufacturer: Steyr Mannlicher GmbH,
Kleinraming, Austria

Cartridge: 9x19mm

Magazine 15 rounds
capacity:

Overall 7.2 inches
length:

Height: 5.12 inches

Barrel length: 4 inches

Cartridge: 27.2 ounces

In 2010, after a reorganization of the company, Steyr again began importing the M9 and M40 series of pistols. These pistols are available in the full size version, a subcompact version, and a third middle-of-the-road version with a full sized frame combined with a slide and barrel of the compact. The most distinctive feature of this handgun is the rather steep grip angle with a deep recess for the thumb webbing of the shooting hand. Combined with the internal arrangements of the gun, this allows the barrel to be lower in the hand, more in line with the shooters arm and thereby reducing muzzle flip when firing. Also of note is the rolling bearing enhancement available in these pistols creates a very smooth trigger release. This model's refined fire control and highly controllable recoil impulse should make it very popular in competition and duty applications.

Field Strip:



1. With the magazine removed, depress the lock button and rotate the takedown lever down until it points down. Pull the trigger to disengage the slide



2. Pull the slide off the front of the frame.



- 3.** Remove the recoil spring assembly by pulling it up and out to the rear.



- 4.** Pull the barrel up and out to the rear.



Steyr M9-A1 field stripped

Detail Strip:



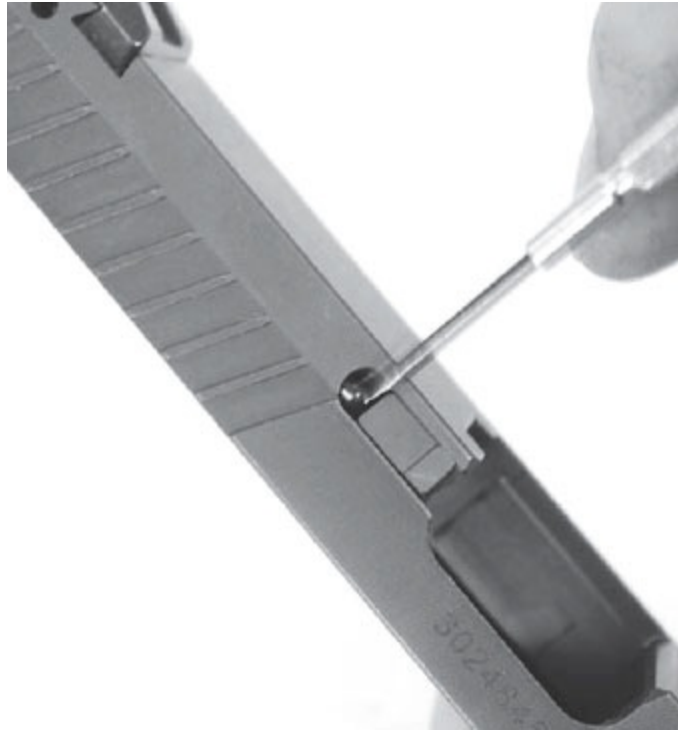
- 5.** Using a small screwdriver or punch, depress the slide plate pin down to release the slide plate, which can then be pushed down and out of the slide.



- 6.** Firing pin assembly and the slide plate pin and spring can now be removed from the back of the slide.



7. This is a roller bearing upon which the firing pin partially rides. This is retained by a pin which can be driven out side to side beneath the rear sight. There is no need to remove this unless it needs to be replaced.



- 8.** To remove the extractor, use a small screwdriver to push back the extractor pin and the extractor can be rolled out into the ejection port. The extractor pin and spring can then be removed.



- 9.** The front and rear sight can be drifted out and to the left. Seen here below the rear sight is the hole for the pin which holds the roller bearing.



- 10.** Align the takedown lever with the line seen here and pull the lever out and to the right of the frame.



- 11.** Depress the lock button until it bottoms out then grasp the two front rails of the frame. Lift the housing out of the frame. **Note:** The lock button is not captured and it will spring out of the frame entirely as you are removing the housing from the frame if you do not control it.



- 12.** Remove the slide catch and spring by pulling the spring up and

off of its post. The slide catch will then also fall off. *The slide catch spring is also under a great deal of tension. Control it!*



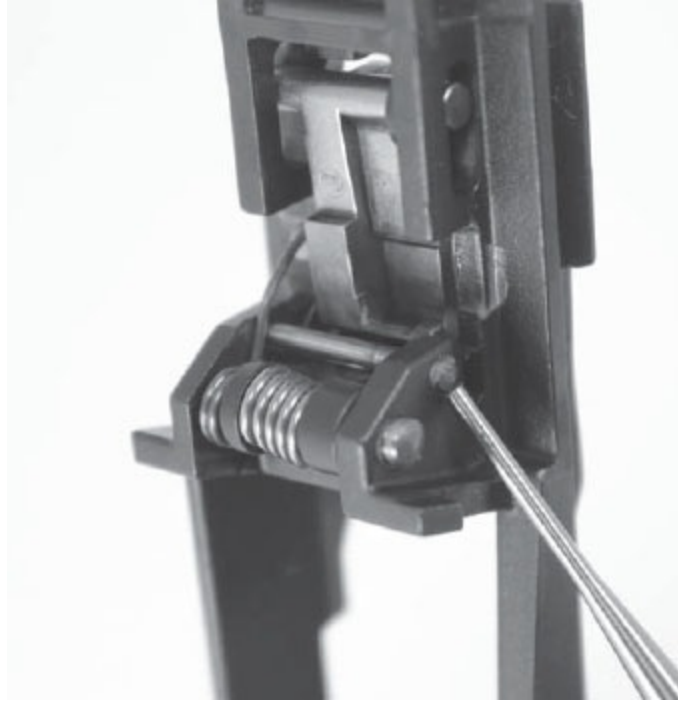
- 13.** While pulling the trigger, grasp the trigger bar. Pull it slightly to the side and lift it out and over to free it from the housing.



- 14.** Push this pin out to free the trigger. The trigger spring, which also functions as a trigger safety spring, can now be removed.



- 15.** Pushing out this pin will free the trigger bar, trigger spring and the trigger safety. **Note:** Care should be taken not to over-compress the trigger spring when the trigger is out of the housing in this fashion as it will ruin the spring.

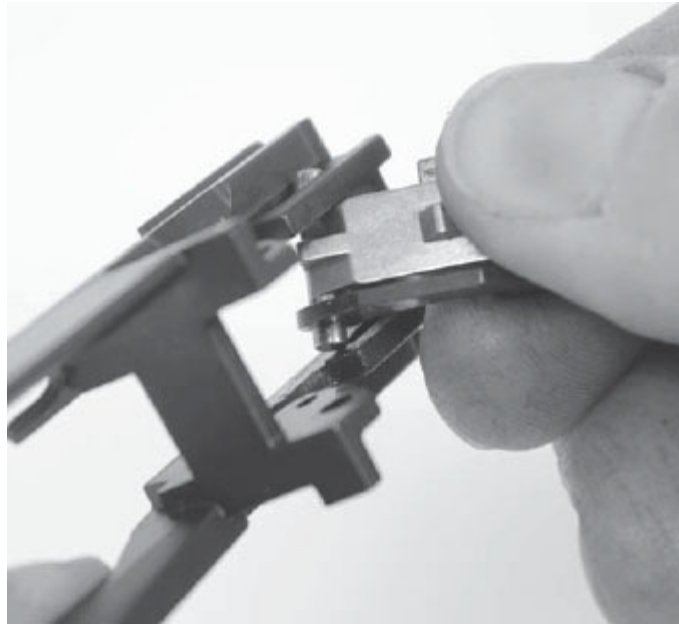


16. Push out the firing pin catch pin.



17. Pushing out the lever pin here will free the lever, firing pin catch spring, and the lever spring. *Be careful as these springs are under*

tension.



- 18.** Take out the drop safety and firing pin catch (the sear) by rotating them slightly so that it can be angled out of their slots.

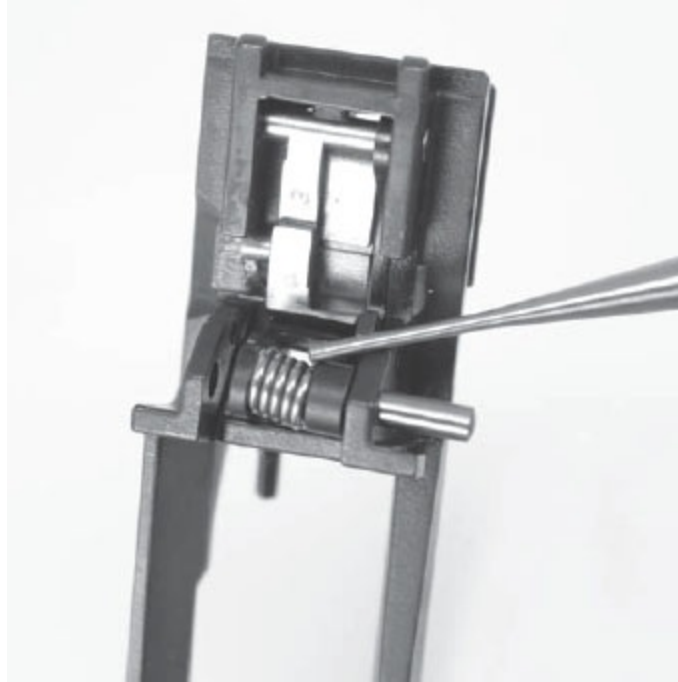


19. The ejector can be replaced by pushing out this pin.

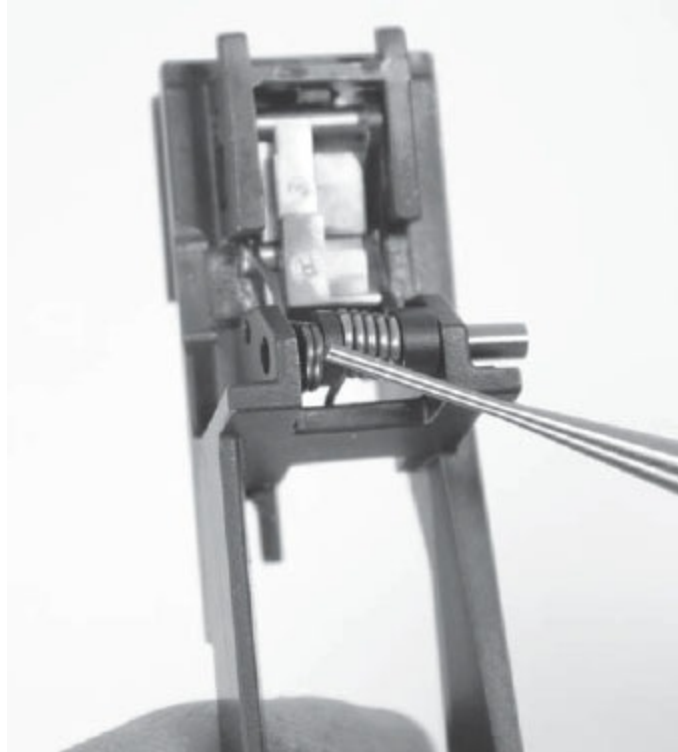


20. To remove the magazine release, pry out the right end of the magazine spring to dislodge the spring rest. Control the spring. The release can then be pushed out to the right.

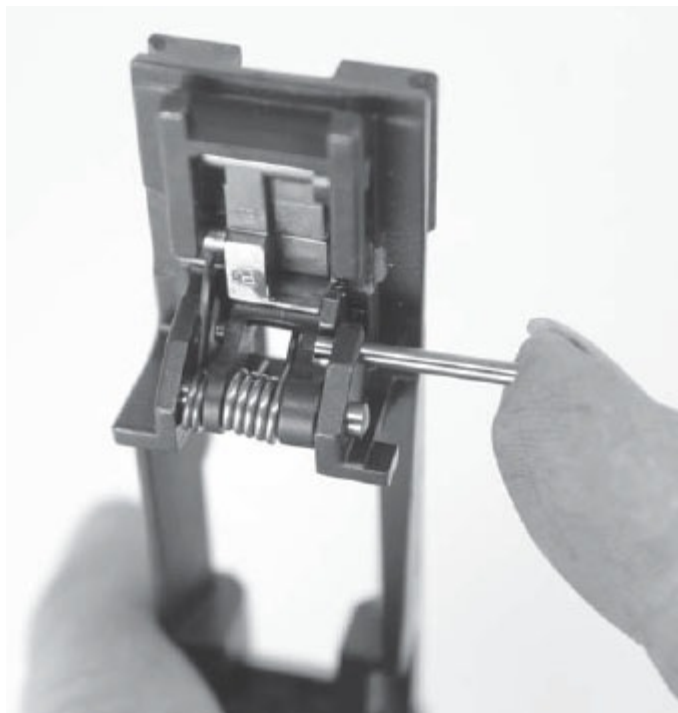
Reassembly Tips:



1. When reassembling the fire control components, install the firing pin catch and drop safety first. Insert the lever pin to retain the lever then the lever spring can be pushed in through the gap in the top and the lever pin pushed into the spring to hold it in. At this point, the lever will be under tension.

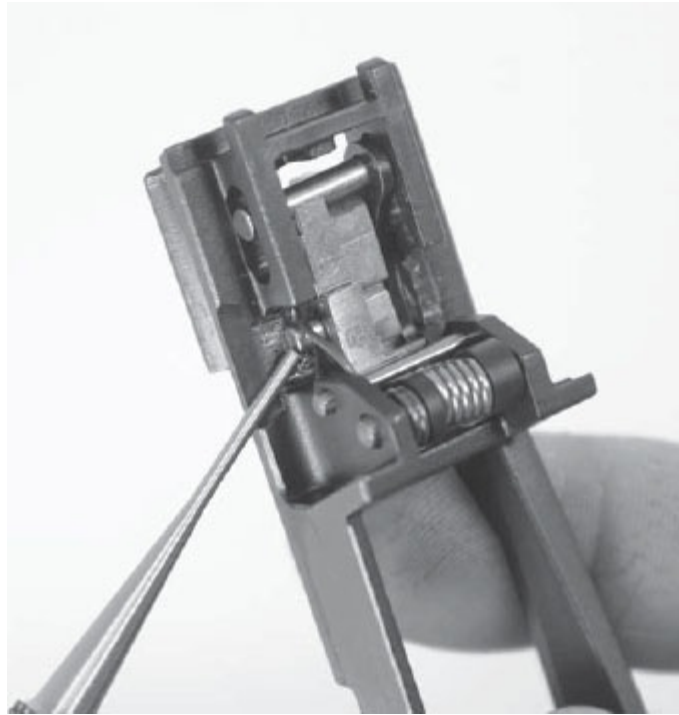


2. Next, install the remaining firing pin catch spring.

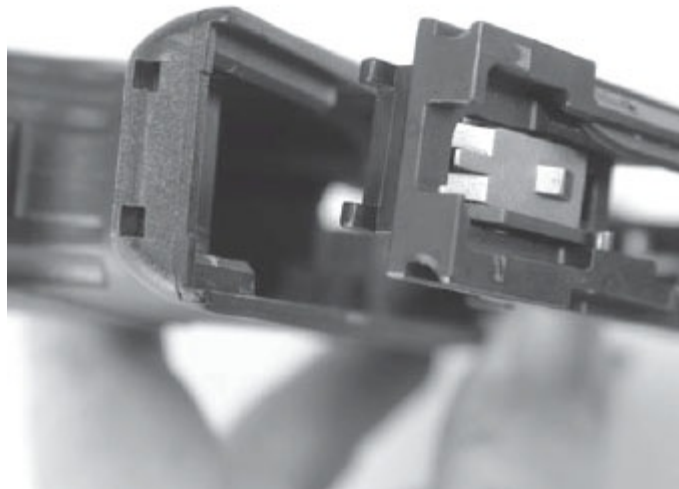


3. Then insert the firing catch pin. This will require pushing the

lever forward slightly in order to get the pin all the way in.



4. The leg of the firing pin catch spring needs to be sitting on top of this nub on the firing pin catch.



5. There are two projections on the back of the housing that slide into two holes in the back of the frame.



6. When the housing is reinstalled, the lock should be arranged in this orientation, with the small radius cut facing forward and to the top.

Steyr 1912



Data: Steyr Model 1912 (Steyr-Hahn)

Origin: Austria

Manufacturer: Waffenfabrik Steyr

Cartridge: 9mm Steyr

Magazine capacity: 8 rounds

Overall length: 8½ inches

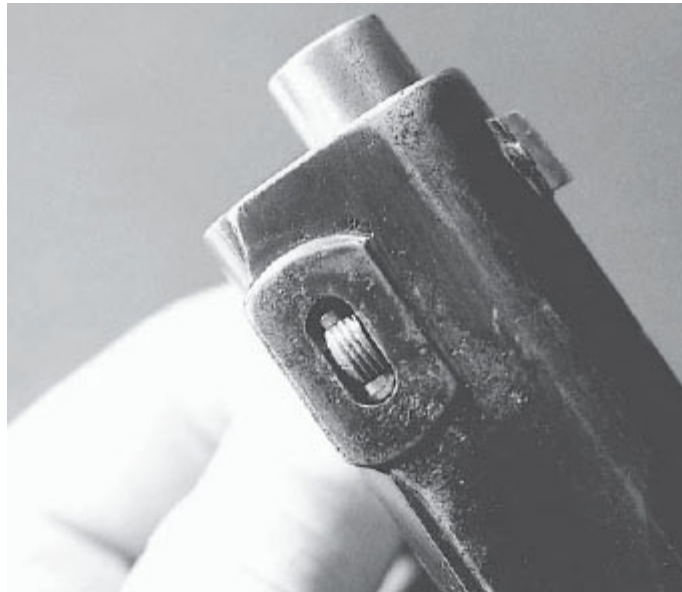
Height: 55/8 inches

Barrel length: 53/16 inches

Cartridge: 34 ounces

The Austro-Hungarian Empire was the first major power of its time to adopt an automatic pistol as military standard, and it chose the Model 1907 Roth-Steyr. In 1911, when Karel Krnka designed the pistol covered here, it was called the Steyr-Hahn (Hahn means “hammer”) to separate it from the previous pistol. The Steyr-Hahn was adopted for military use in 1912. As with all Krnka designs, it is beautifully engineered, and like all guns made by Steyr it is finely machined of the best materials. It was produced with much hand fitting, and the joining of all parts is quite precise.

Field Strip:



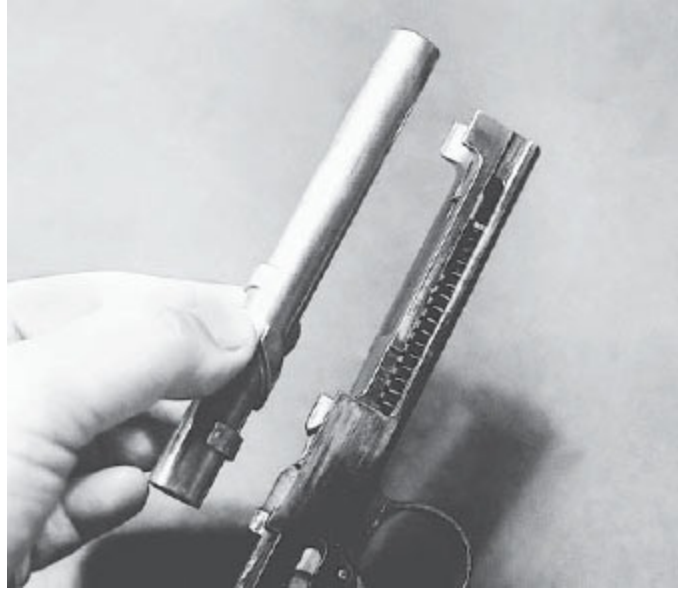
1. The takedown-latch is a cross-bar at the lower front of the slide. It is possible to insert it from either side, but the proper placement is with the release on the left side, with the release either up or down, as shown. Depress the release and push the bar toward the right side of the slide.



2. When the bar has been pulled out until it stops, depress the release spring (it is marked with an arrow) and withdraw the bar from the slide.



3. Draw back the slide until it stops, and lift it up and off the frame.

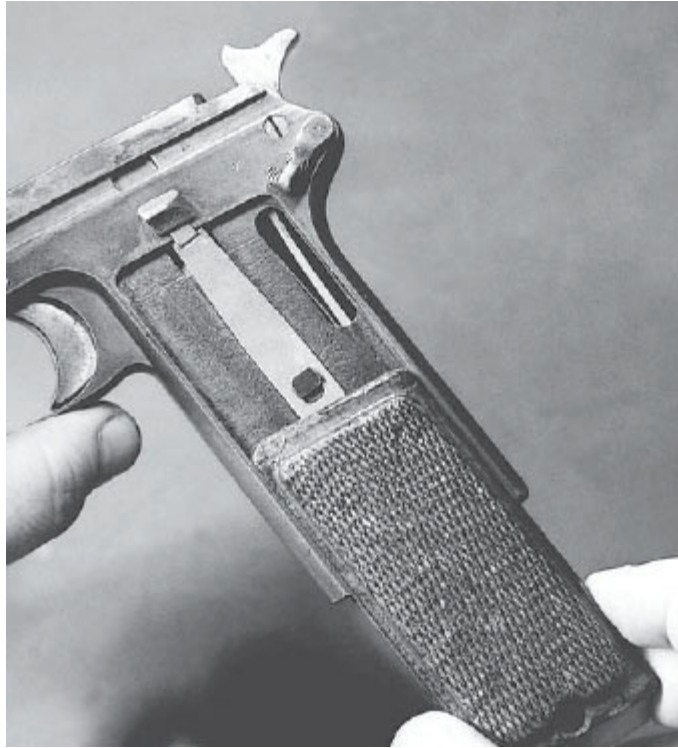


4. Lift the barrel from its recesses in the top of the frame. **Gun is now field-stripped.**



Steyr 1912 field-stripped

Detail Strip:



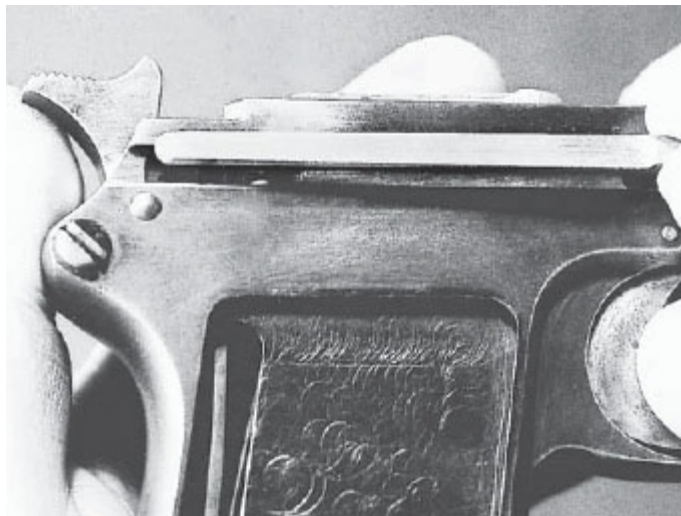
5. Remove the cross-screw at lower center of the grip frame and slide the grip panels downward and off the frame.



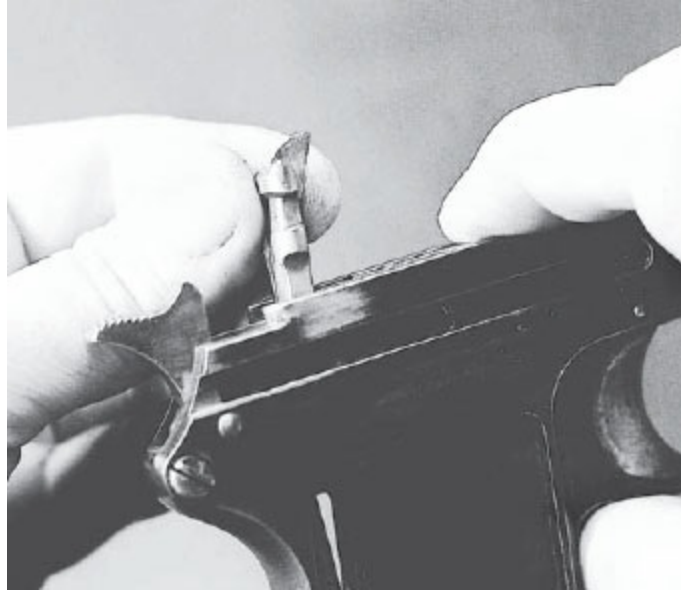
6. Depress the upper end of the slide-latch spring and turn it from beneath the slide-latch. Continue turning it until it can be freed from its stud on the frame.



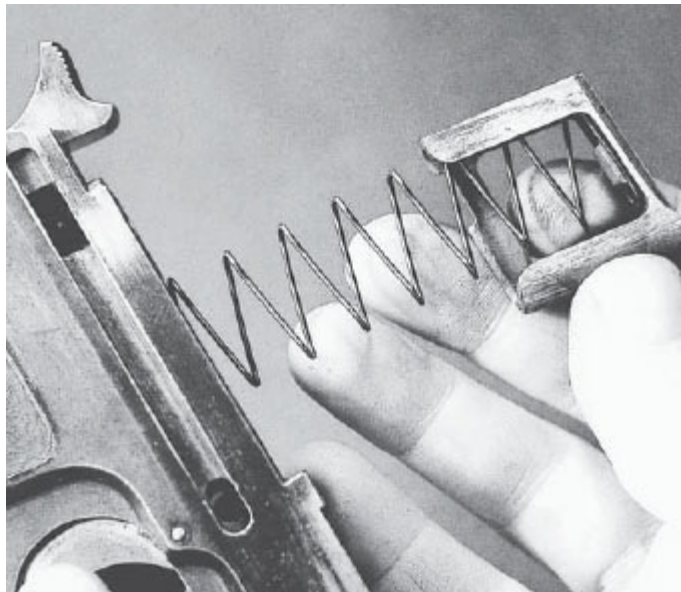
7. Remove the slide-latch downward.



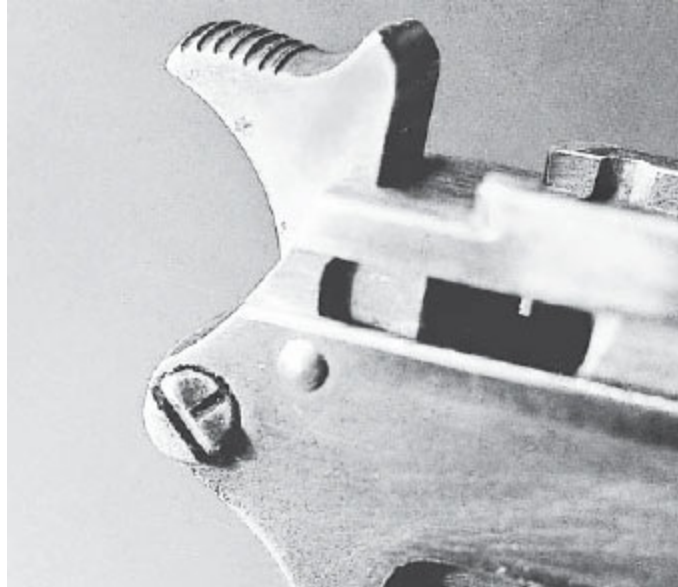
8. Lift the trigger bar from its recess on the right side of the frame.



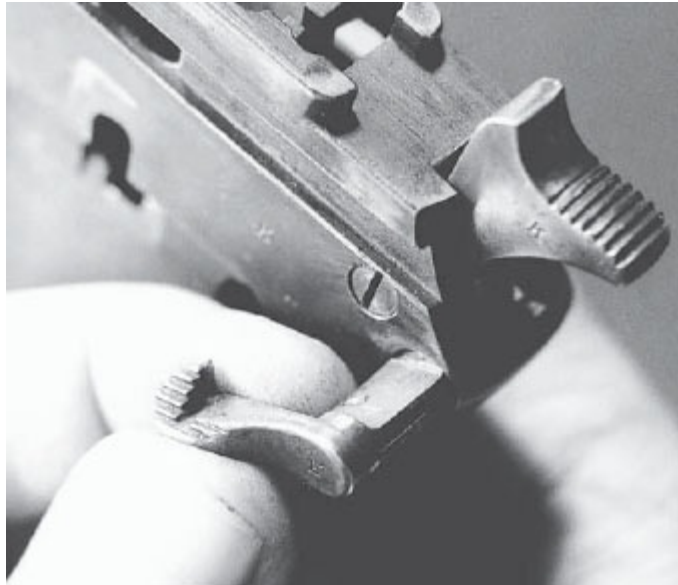
- 9.** Depress the magazine follower and remove the ejector from the top of the frame.



- 10.** Remove the magazine follower and spring from the top of the frame.



- 11.** The cross-shaft of the safety-lever is split and tempered to hold the safety in place. The long slot in its right end is not a screw slot. Place a small screwdriver tip against the short slot in its concave face, and push the shaft toward the left.



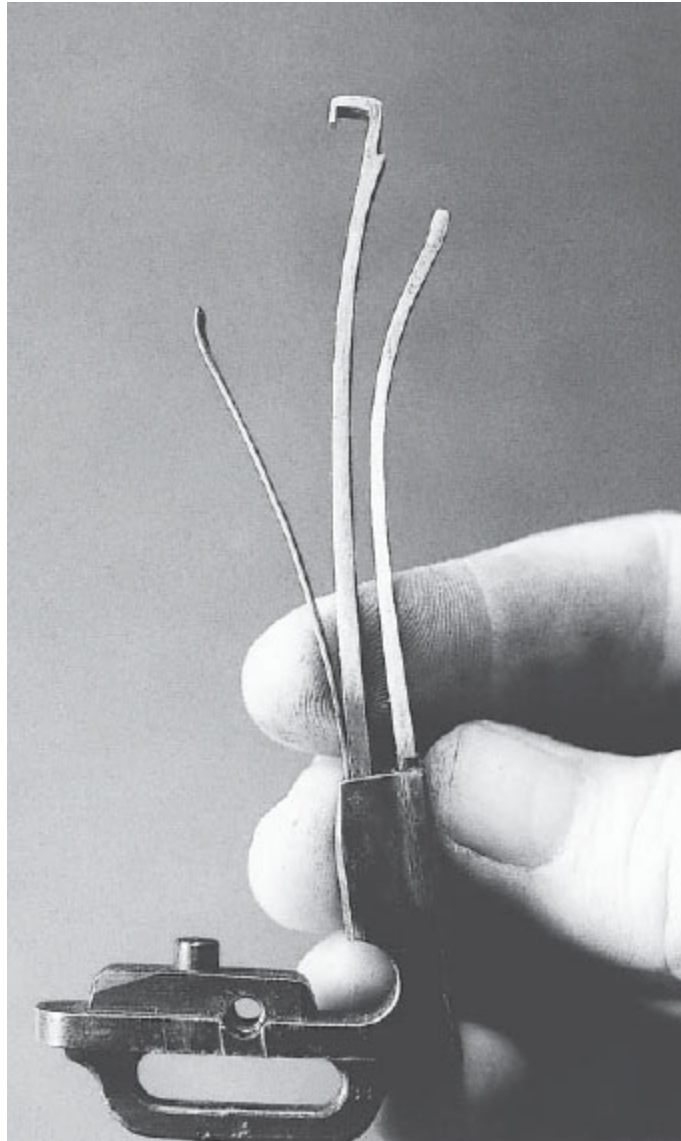
- 12.** Remove the safety-lever toward the left. Note that the hammer is at rest.



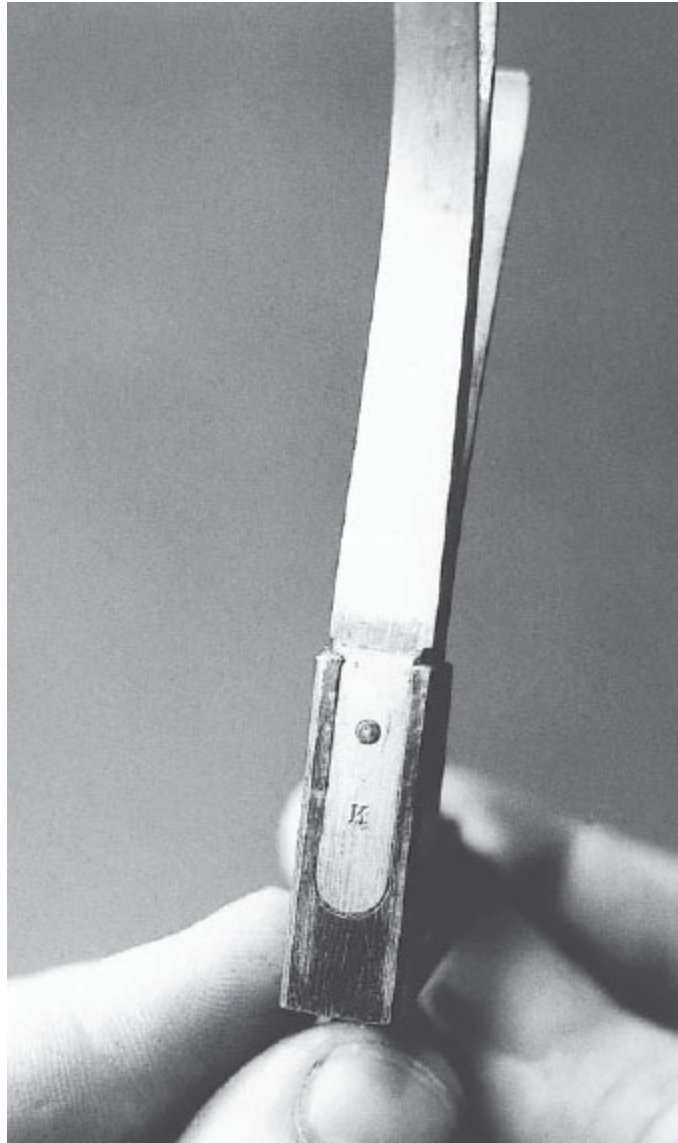
- 13.** The hammer is retained by the large slotted cross-screw at the upper rear of the frame. Remove the cross-screw and lift out the hammer. There will be slight tension from the hammer spring, but not enough to cause any difficulty.



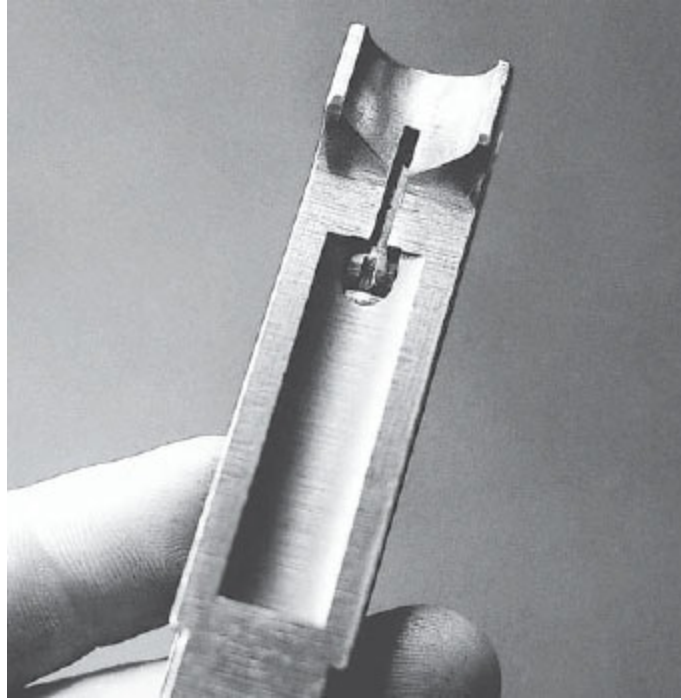
- 14.** Remove the sub-frame by sliding it down and out of the grip frame. Tight fitting and the tension of the springs may make it necessary to help it along with a small hammer and nylon-tipped punch.



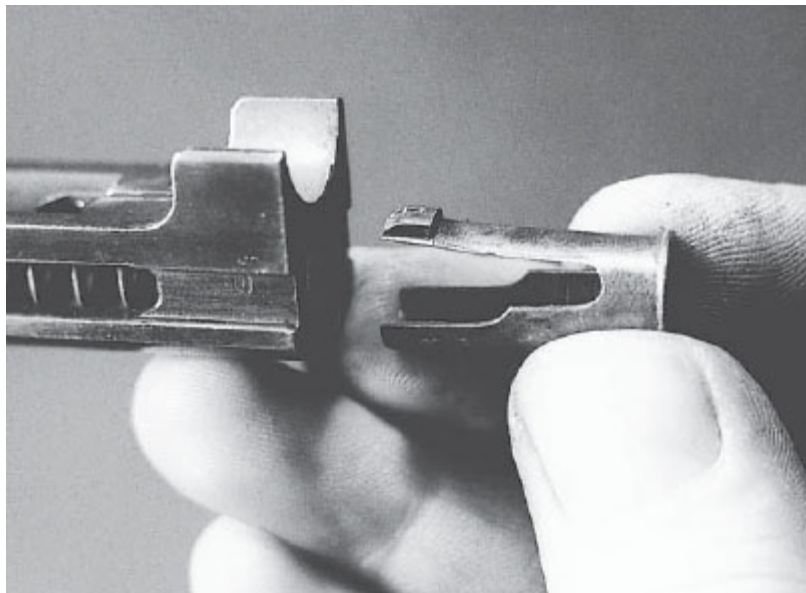
- 15.** The sub-frame holds the hammer spring, the long, tempered sear, and the disconnector spring as a captive unit.



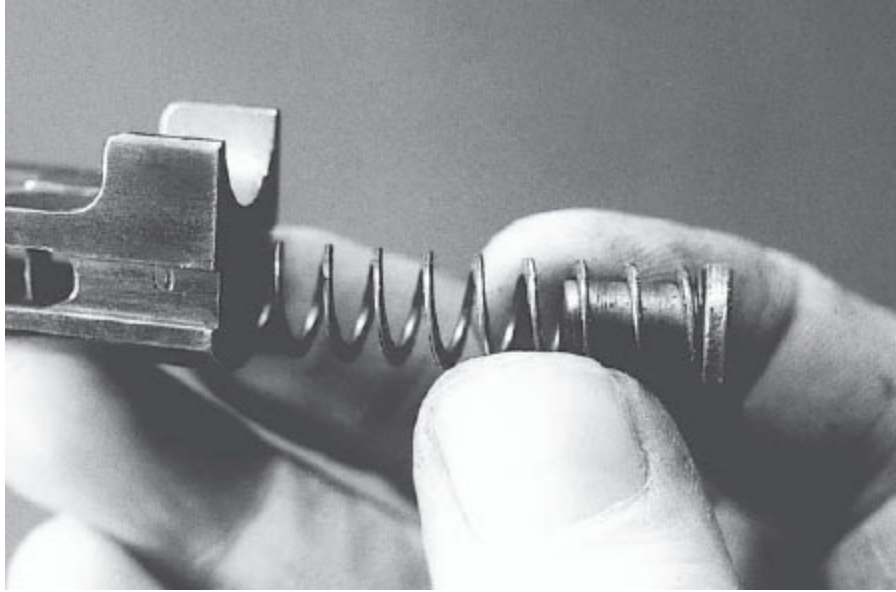
- 16.** The three springs are dovetail mounted in the sub-frame. Before they can be removed, a small lock-pin must be drifted out.



- 17.** The recoil spring plug at the front of the frame is retained by a latch similar to the one which holds the safety-lever. Place a small screwdriver or a small diameter drift punch in the slot at the top rear of the plug, and depress the catch while moving it toward the front.



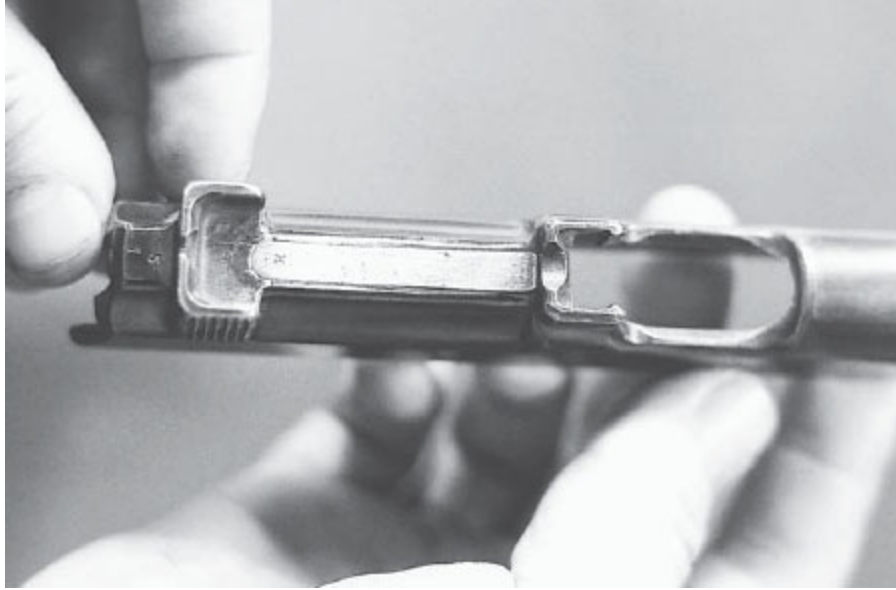
- 18.** Remove the plug from the front of the frame.



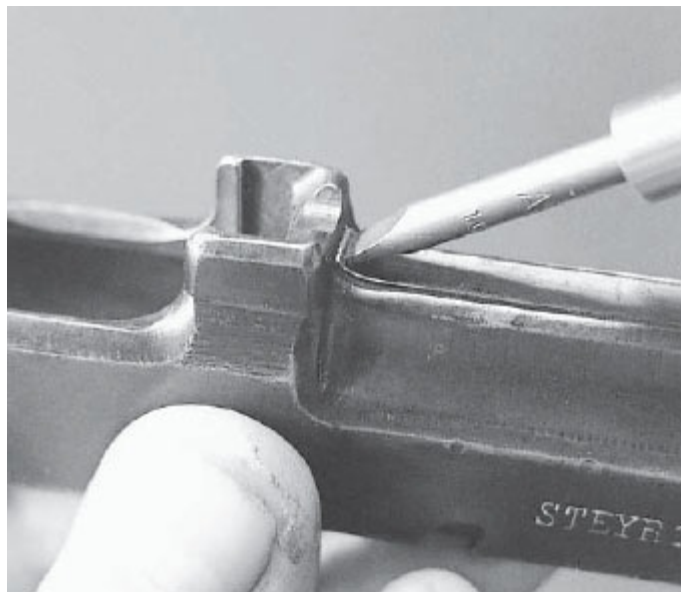
- 19.** After the plug is removed, the recoil spring and its plunger can be taken out toward the front.



- 20.** The trigger is retained by a cross-pin. After the pin is drifted out, the trigger is removed down and forward, into the interior of the guard.

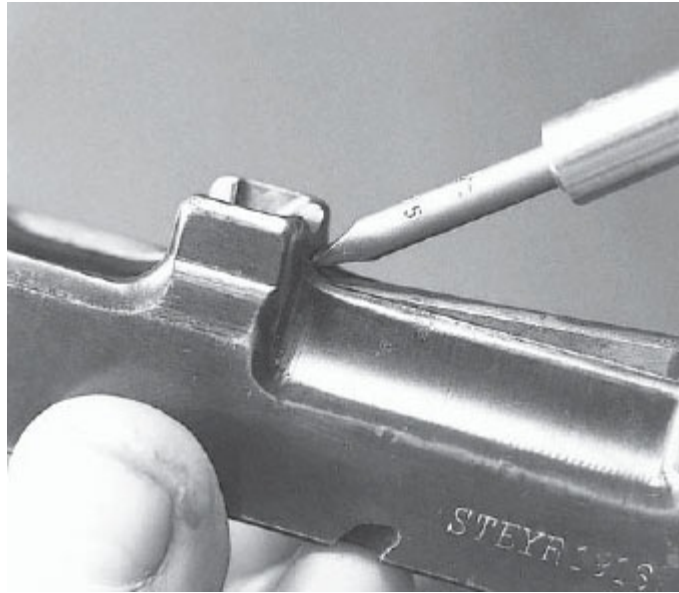


- 21.** The extractor is mounted in a recess in the top of the slide, and a lower lobe of the extractor retains the firing pin and its spring. Removal of this system is not advisable unless absolutely necessary for repair. Extractors are broken more often in disassembly than in actual use.

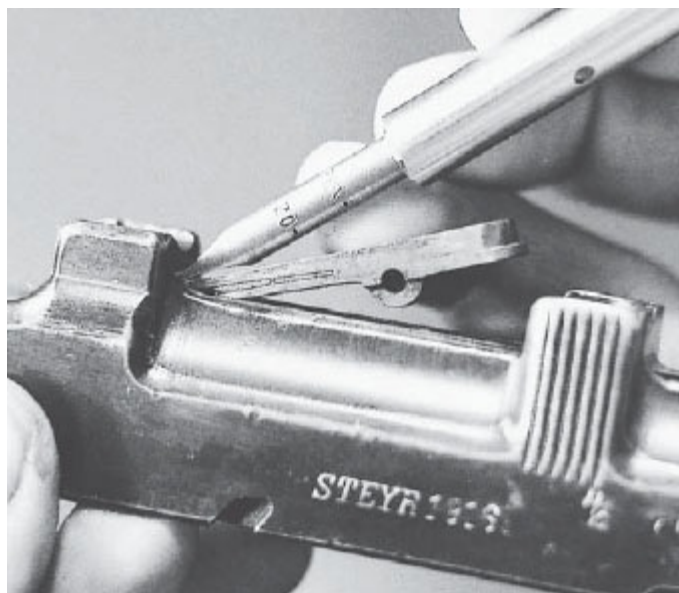


- 22.** Place a tool of slightly narrower width than the part against the front upward curve of the extractor, and exert pressure down and forward. A light tap with a hammer on the tool handle may be

necessary.

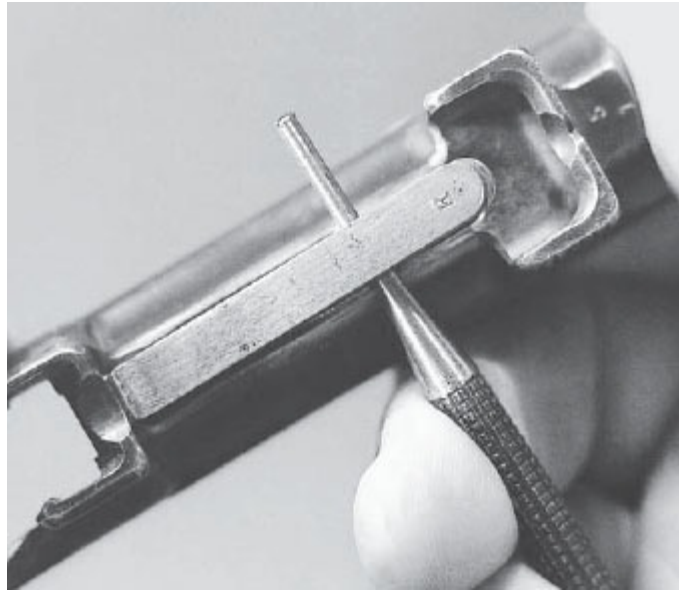


- 23.** When the top plate of the extractor is depressed enough to clear its retaining shoulder, the extractor will move forward and its rear portion will rise from its recess in the slide. If only firing pin removal is desired, this can be done now without actually taking out the extractor.



- 24.** Continue pressure on the extractor plate until the rear portion of

the extractor is clear of its recess in the slide.

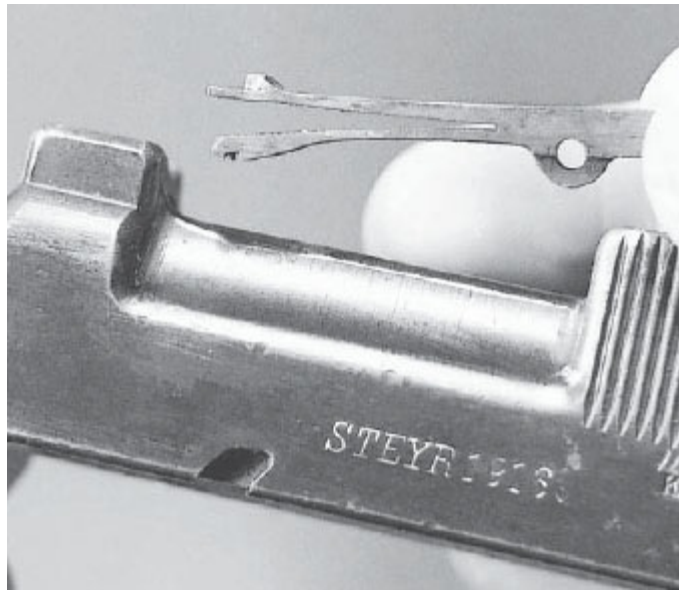


- 25.** Insert a tool through the hole in the extractor lobe and pull the extractor up and toward the rear until the extractor beak catches on the top of the breech face. Don't try to force it farther to the rear or the beak will be broken.

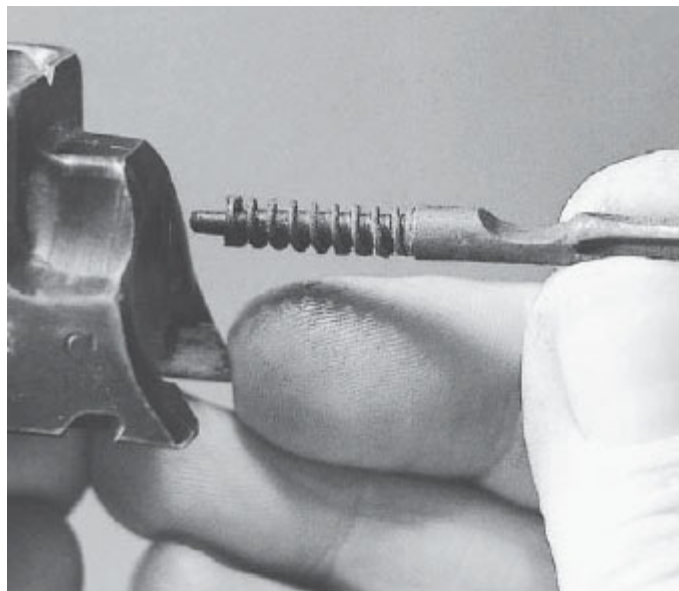


- 26.** Insert a screwdriver from the front, through the ejection port, and lift the extractor beak to free it from the top of the breech face,

levering it upward and toward the rear.

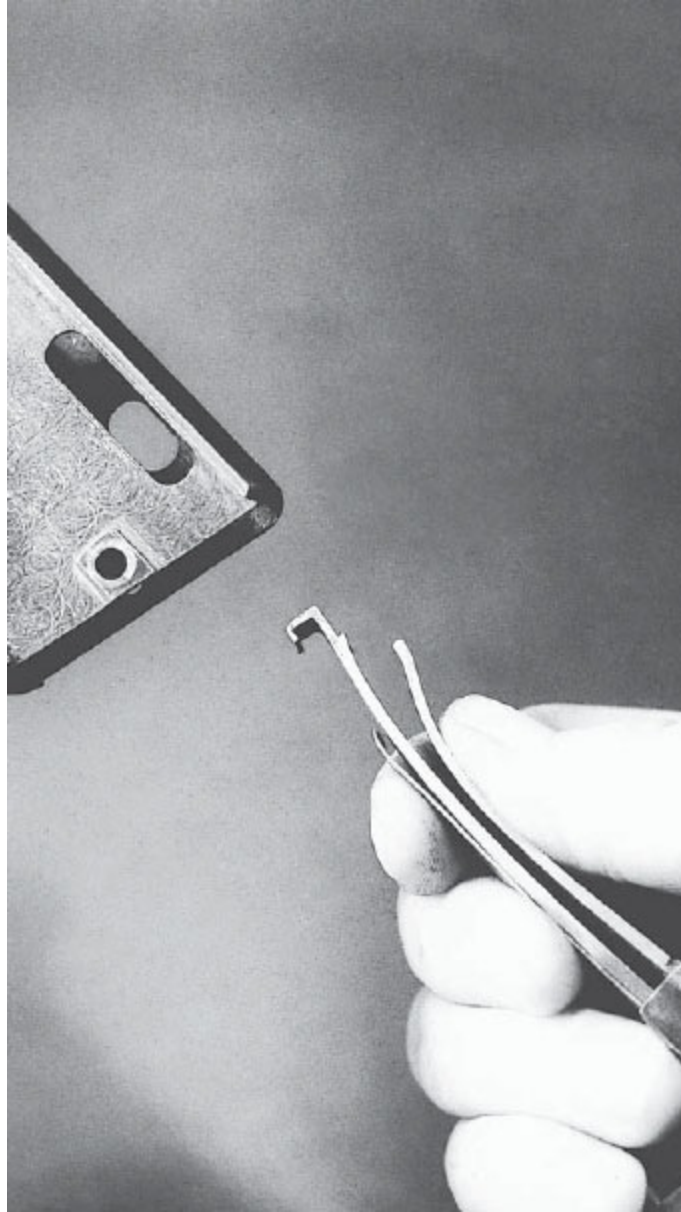


27. Remove the extractor upward and toward the rear.

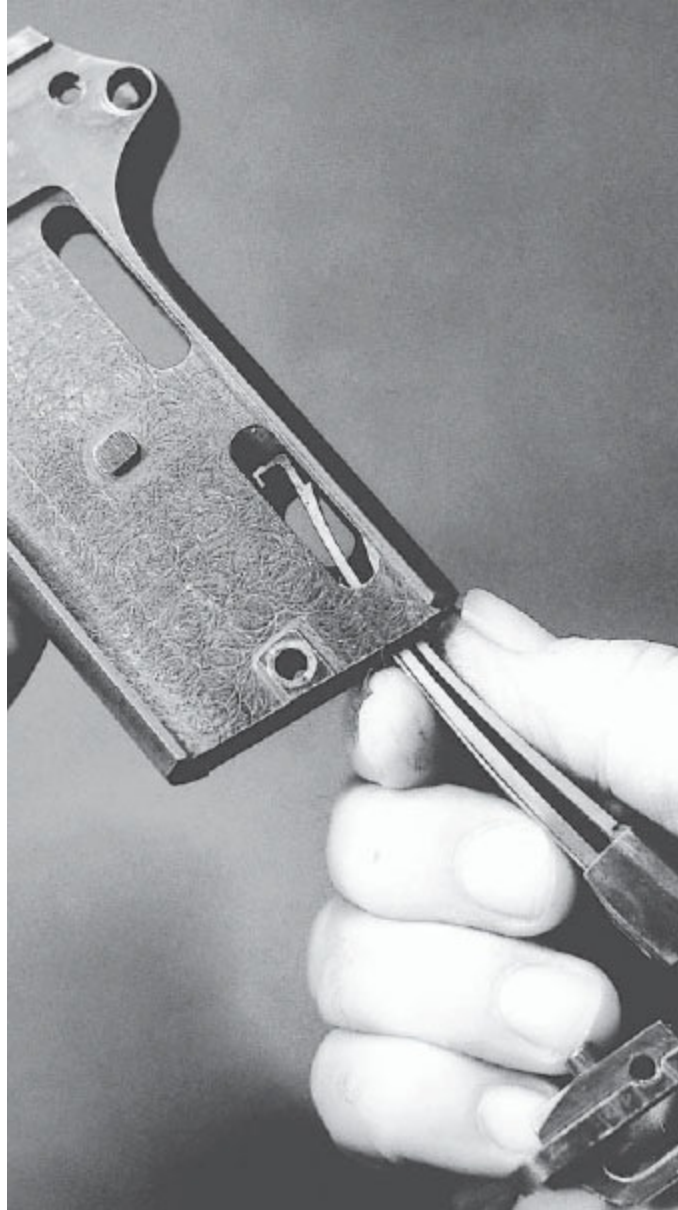


28. Remove the firing pin and its spring from the rear of the slide.

Reassembly Tips:



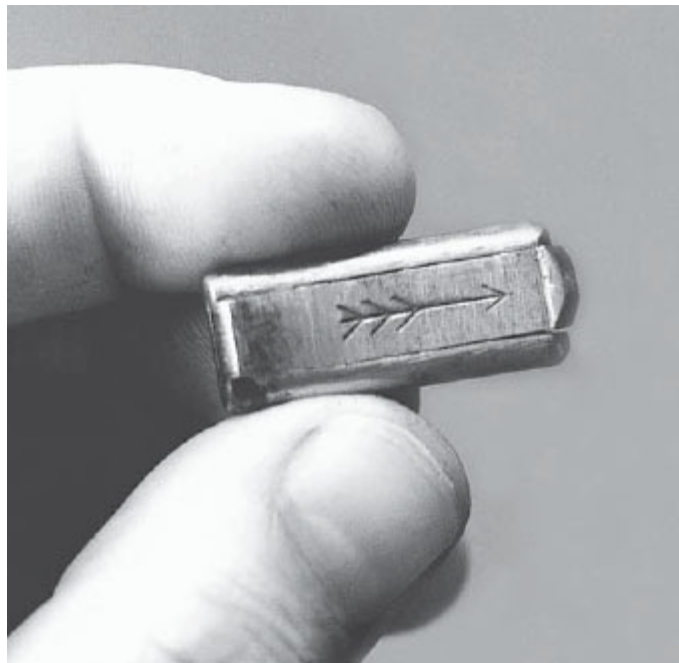
1. When replacing the sub-frame, compress the springs before insertion into the grip frame.



2. Be sure that all three springs enter the tunnel at the rear of the grip frame before sliding the sub-frame into place.



3. Before replacing the slide, be sure the barrel is in the position shown, with the rotation lugs resting on the right side of the frame.



4. When replacing the takedown-latch bar, the arrow should be on the underside, and insertion should be toward the left side. In

other words, from right to left.



5. When replacing the firing pin and extractor, hold the firing pin in place while pushing the extractor down and forward. Final seating of the extractor may require a light tap with a nylon or plastic hammer. Remember that the extractor must move forward beneath its shoulder at the front, then toward the rear to engage in its rear flange.

Taurus 24/7 G2



Data: Taurus 24/7 G2

Origin: Brazil

Manufacturer: Forjas Taurus, Brazil

Cartridge: 9mm Luger

Magazine capacity: 17 rounds

Overall length: 7.28 inches

Height: 5.8 inches

Barrel length: 4.2 inches

Weight: 28 ounces

The 24/7 series of handguns, manufactured by Taurus in Brazil and imported by Taurus International Mfg. Co., has the distinction of being one of the few striker fired pistols which has a second strike capability. This means if the striker failed to ignite the primer of the cartridge in the chamber then the trigger can immediately be pulled again for another try without having to manually cock the gun by operating the slide. In 2010, the second generation model called the “G2” was released. The G2 series’ takedown is dissimilar to the G1. Among other things, it uses a pull down type takedown latch rather than the traditional lever/pin. The G2 is available in 9mm, .40 S&W, and .45 ACP.

Field Strip:



1. With the magazine removed, pull the slide slightly to the rear and simultaneously pull down on the disassembly latch.



2. Pull the trigger and then pull the slide from the front of the frame.



3. Remove the recoil spring assembly.



4. Lift the chamber end of the barrel to remove it from the slide.

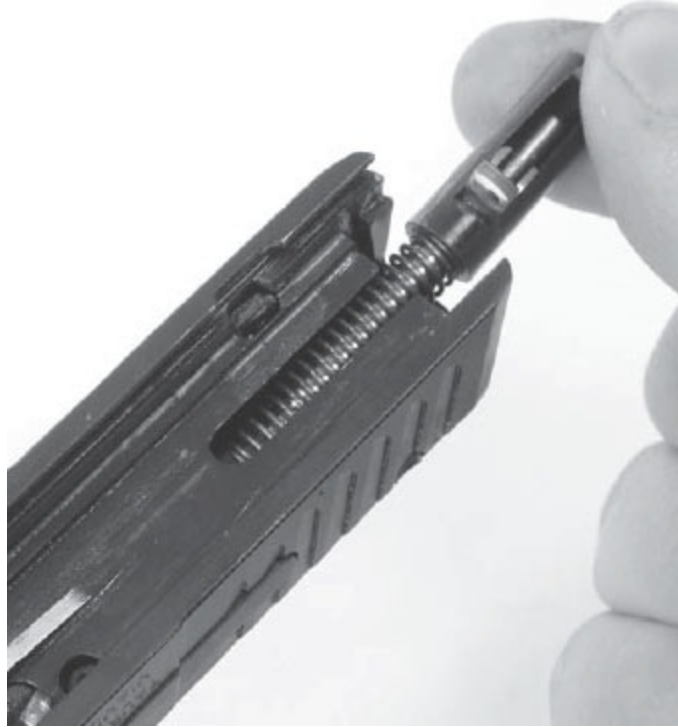


Taurus 24/7 G2 field stripped

Detail Strip:



5. Depress the firing pin sleeve and simultaneously push the slide cap down and out of the slide.

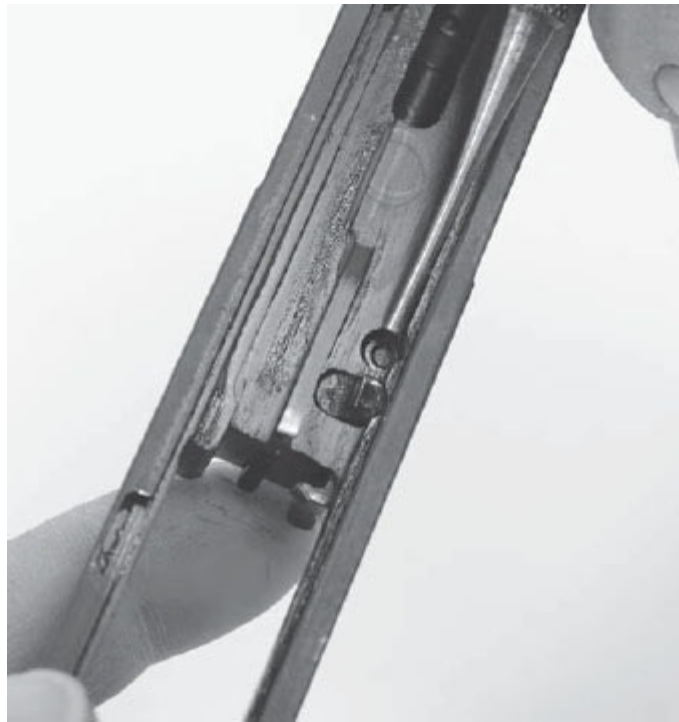


6. The firing pin assembly can now be removed from the slide.



7. Compress the firing pin spring and remove the firing pin spring

bushings. This will allow the sleeve, firing pin, and firing pin return spring to be separated.



- 8.** Depress the extractor axle to free the extractor. Pull the extractor and extractor spring from the slide. The extractor axle and axle spring will fall from the slide.

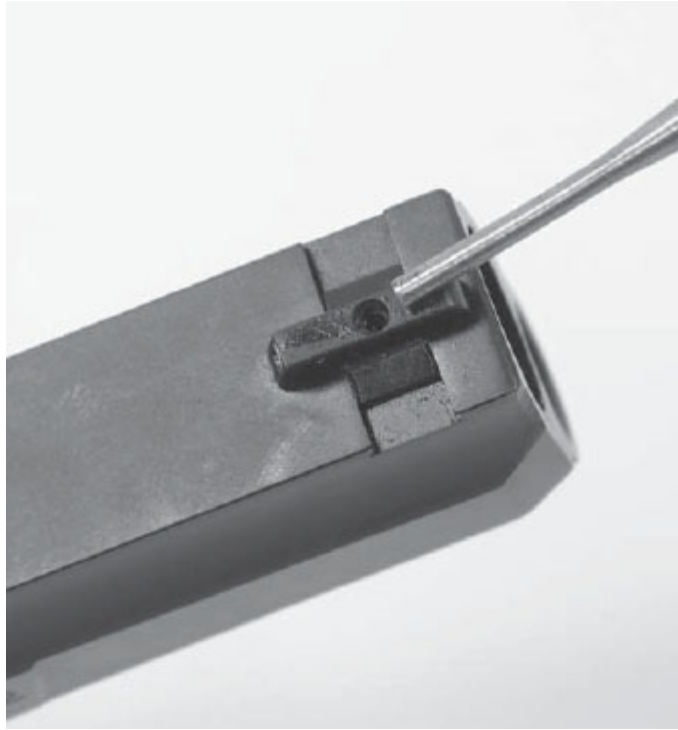


9. Remove the firing pin block and spring.



10. This is the key lock slide block. The internal lock assembly should

not be removed, and if damaged or nonfunctional, the pistol should be returned to the factory.



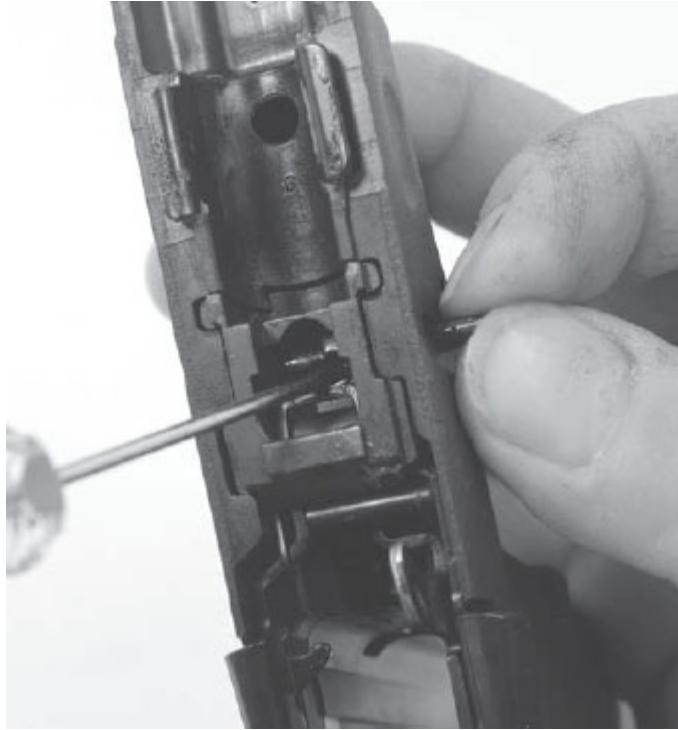
- 11.** The front sight can be removed by unscrewing the set screw and pushing it out either way.



12. Drive out the two pins on either side of the disassembly latch hole.



- 13.** The rear sight is fully adjustable and can be pushed out to the right. Beneath the rear sight are the key lock parts.



- 14.** Fully depress the disassembly lock pin and push the disassembly latch out to one side. The pin and spring will now be free to fall from the frame.



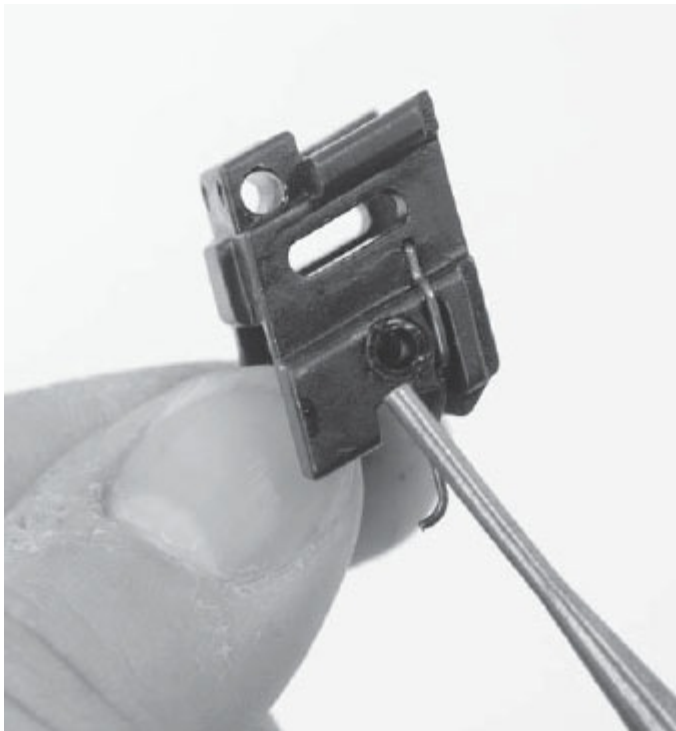
- 15.** Drive out this pin to remove the loaded chamber indicator and spring.



- 16.** Gently pry out the central support block and remove it straight up out of the frame.



17. Remove the slide catch.



18. Seen here on the central support is the slide catch spring and the

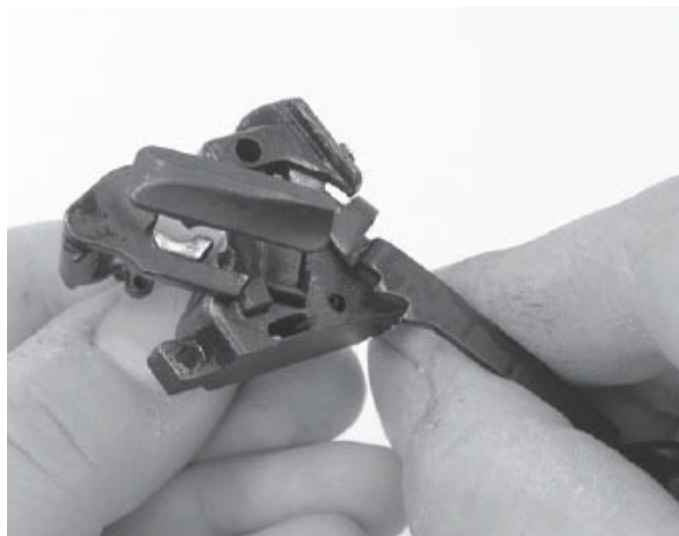
pin bushing which has a twin on the opposite side. There should be no need to remove these unless replacement is necessary.



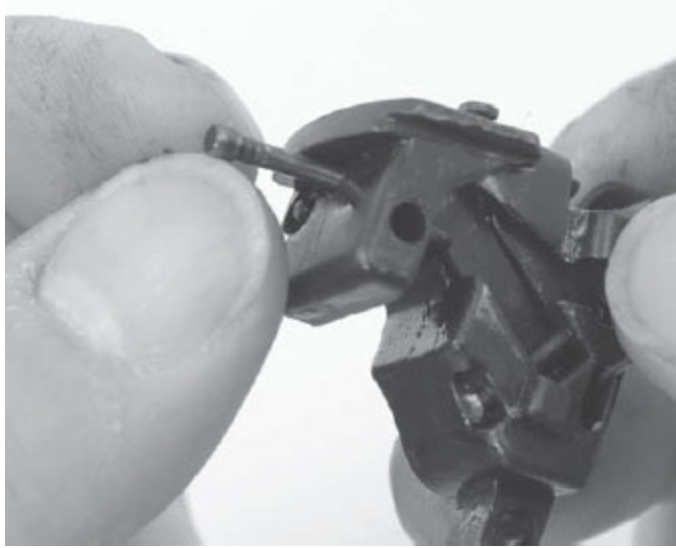
- 19.** Drive out the indicated pin and the remaining pin behind the safety lever.



20. The fire control housing, with trigger, can now be pulled from the frame.



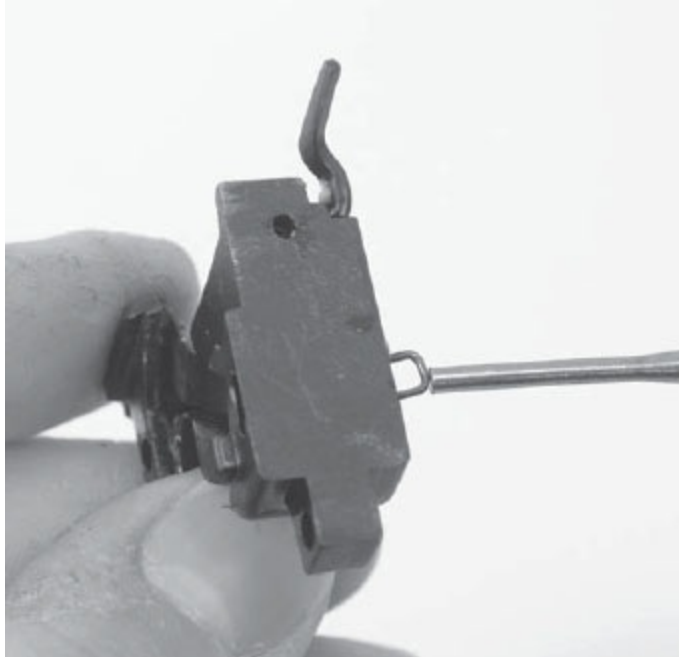
21. The manual safety can be pulled right off of the housing.



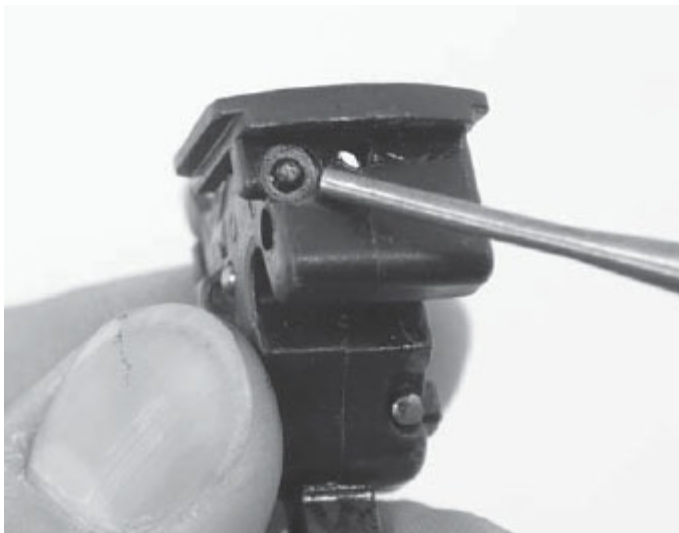
- 22.** This pin, which can be pushed out from the front, should be removed to free the trigger bar, trigger bar stop, and the trigger bar stop spring, all three of which are easily removed with the pin extracted.



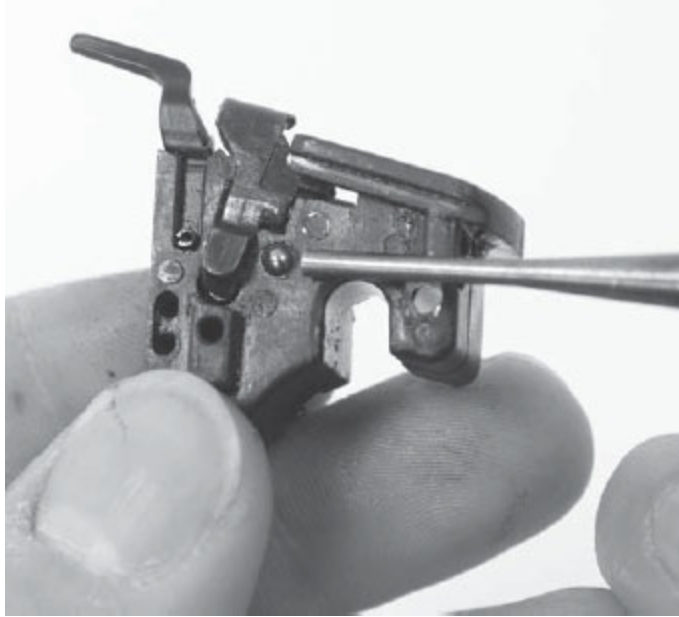
- 23.** This pin, which is in a blind hole, secures the disconnecter.



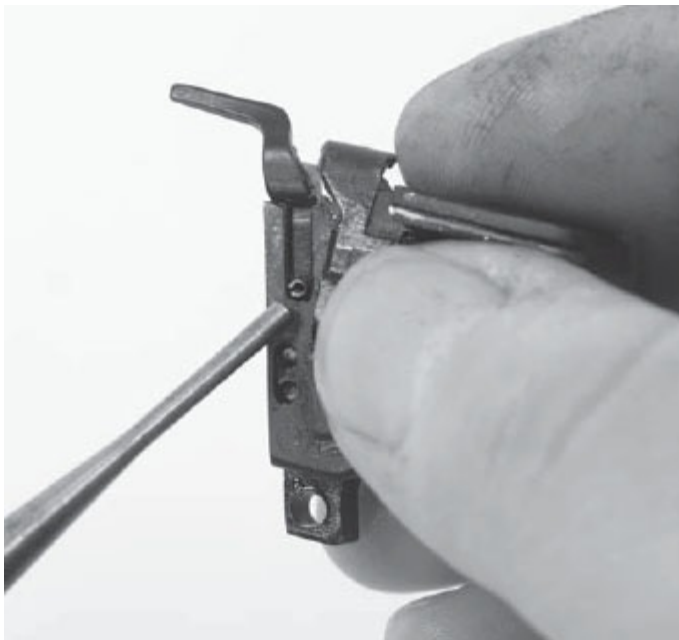
24. The manual safety spring can be pulled from the left side of the fire control housing.



25. This pin, which secures the trigger bar block and spring, is also in a blind hole.



26. The manual safety detent ball and spring are staked in place.



27. Driving out this pin will free the ejector.



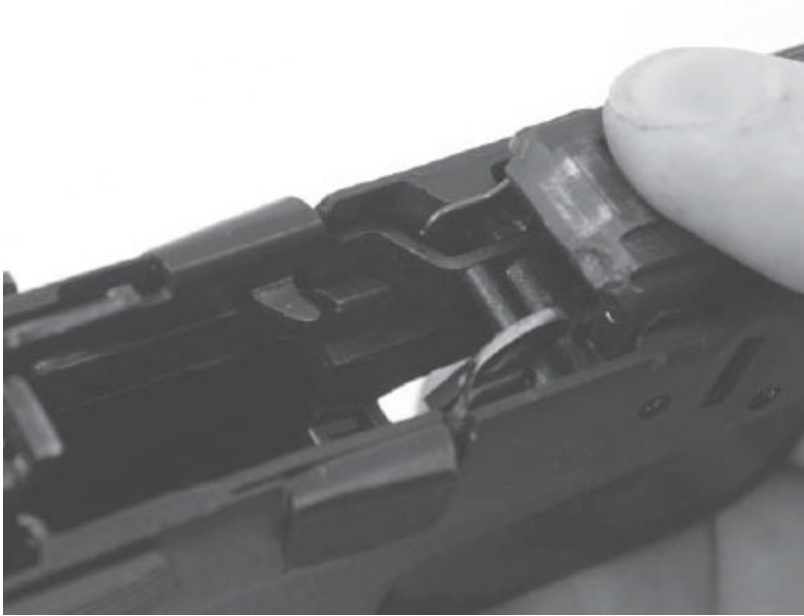
- 28.** This pin retains the trigger bar and trigger spring. The pin below it retains the trigger safety and the spring. There is no need to remove these unless replacement is necessary.



- 29.** Driving out this pin will free the magazine release spring button and pin bushing.

Reassembly Tips:

- 1.** When reinstalling the trigger and fire control housing, insert the rear-most pins in the frame before reinstalling the forward portions of the trigger and central support. This will ease installation of the forward components.



- 2.** Reinstall the slide catch, then the central support. The slide catch spring will engage the slide catch on its own.



- 3.** When reinstalling the disassembly latch, the side with the depression should face the rear.

Taurus PT 740 Slim

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the PT 740 Slim also apply to the following gun:

Taurus 709 Slim



Data: Taurus 740 Slim

Origin: Brazil

Manufacturer: Forjas Taurus S.A., Brazil

Cartridge: .40 S&W

Magazine capacity: 7 rounds

Overall length: 6.24 inches

Height: 4.5 inches

Barrel length: 3.2 inches

Weight: 19 ounces

A thin entry into the bustling compact/subcompact pistol arena, the Taurus Slim pistols are available with black or stainless slides and are chambered in 9mm and .40 S&W. Similar to many others in the field with a trigger safety and easy takedown latch, it adds the Taurus trademark of a second strike capability to the trigger, in case the first pull does not fire the chambered cartridge. The Slim pistols were introduced in 2009 and are imported by Taurus International Mfg. Co., USA.

Field Strip:



1. Remove the magazine. To remove the slide, pull the slide slightly to the rear while at the same time pulling down on the disassembly latch.



2. While holding the disassembly latch down, pull the trigger to fully release the slide. Then pull the slide off the frame.



3. Remove the recoil spring assembly up from the back and out of the slide.

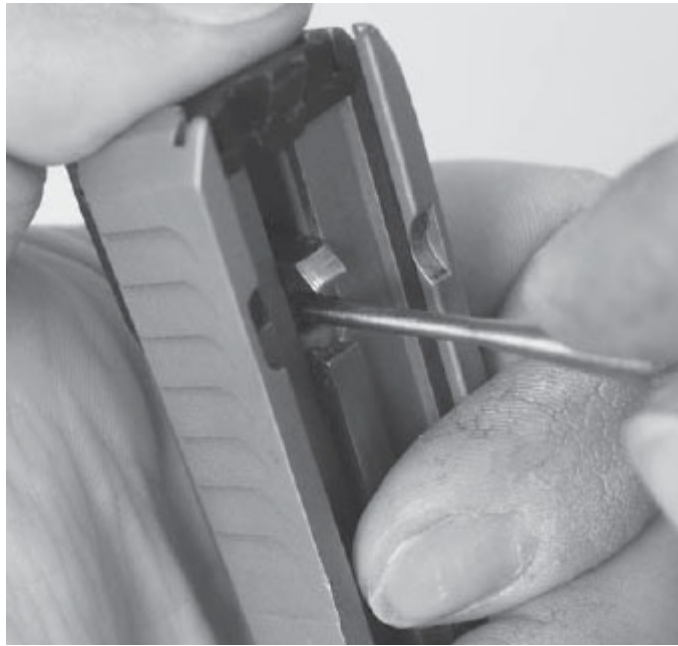


4. Remove the barrel by lifting it up at the chamber end and pulling it from the slide.



Taurus PT 740 Slim field stripped

Detail Strip:



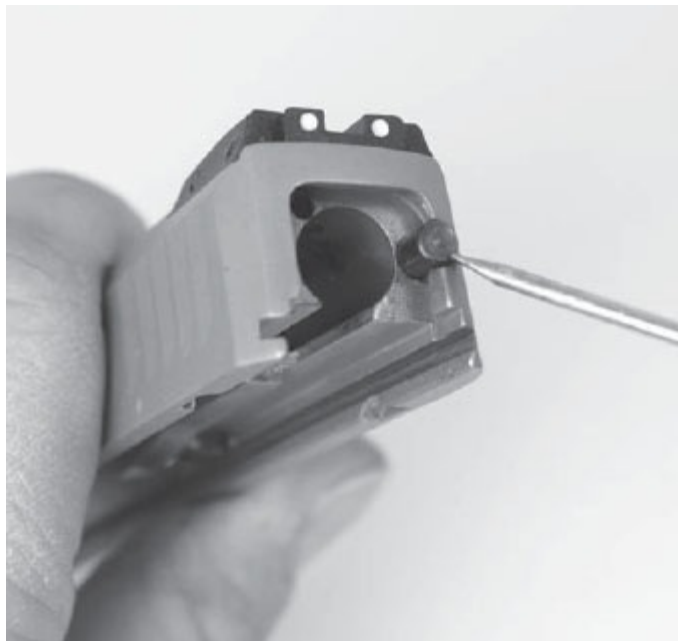
5. Using a small tool, press the firing pin sleeve forward into the slide while at the same time pushing down on the slide cap. Push the slide cap all the way out of the slide.



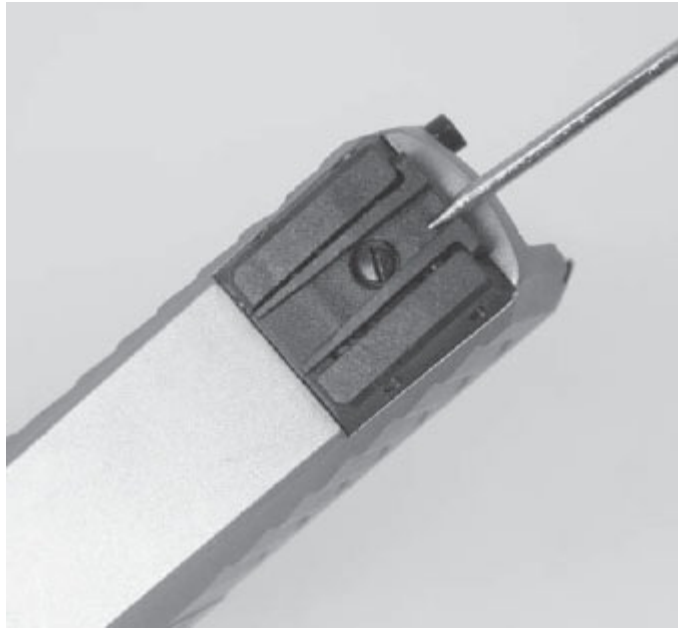
6. Pull out the firing pin assembly.



7. To disassemble the firing pin assembly, compress the firing pin spring and remove the firing pin spring bushings. This will allow the spring sleeve and the firing pin return spring to be removed from the firing pin.



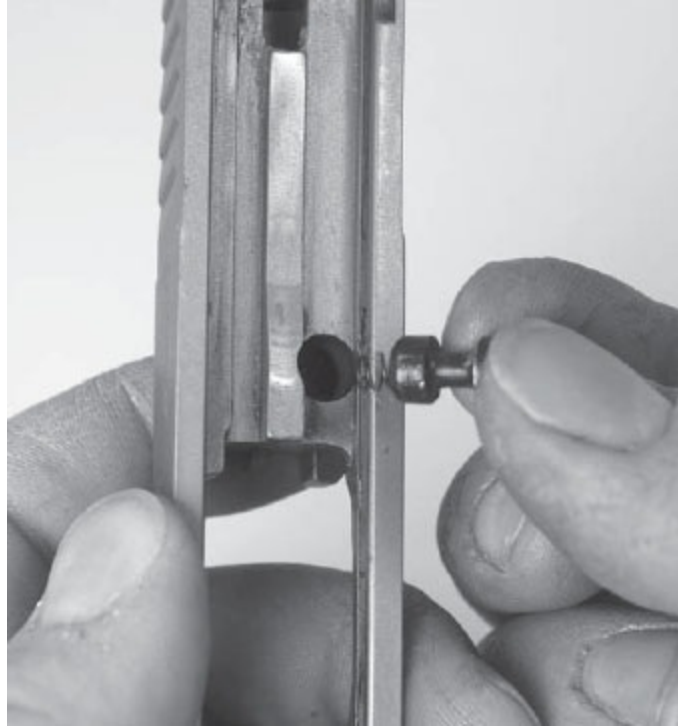
- 8.** The extractor spring plunger can only be removed by first removing the rear sight and then the internal key lock. This part is highly unlikely to need replacement, and disassembly of the internal lock should not be attempted outside the factory.



- 9.** If necessary, to remove the rear sight, remove the rear sight screw and slide the rear sight out to the right.



- 10.** With the slide cap removed, the spring tension on the extractor has decreased enough that the extractor can be rolled out of its slot into the ejection port. Depressing the firing pin block will allow the extractor to be removed. The extractor spring and plunger will follow.



11. Remove the firing pin block and its spring.

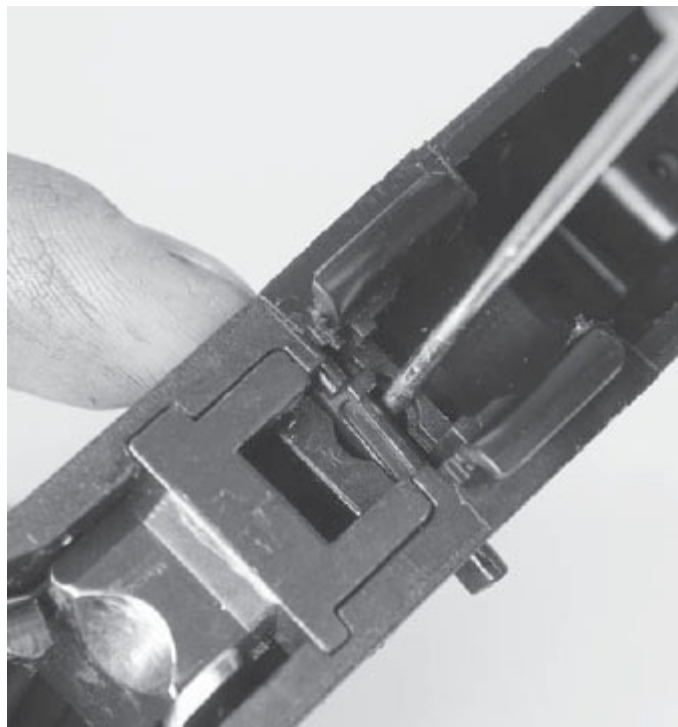


12. To remove the loaded chamber indicator, and its spring, drive out

this pin.



13. The front sight is retained by this screw.



- 14.** The disassembly latch can be removed by depressing its spring and plunger and then sliding the latch out to either side. Inverting the frame will cause the spring and plunger to fall out of the frame.



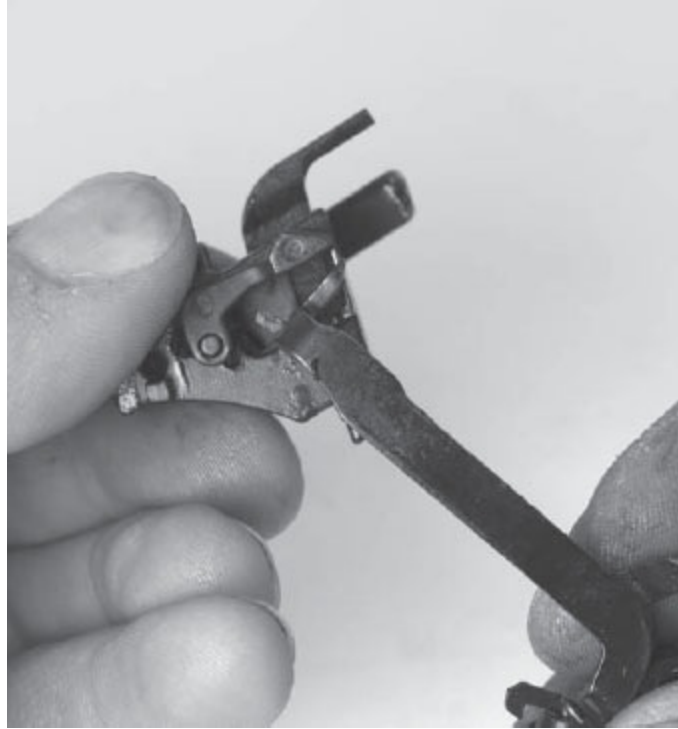
- 15.** Drive out these two pins above the trigger.



16. Drive out the two pins at the rear of the frame.



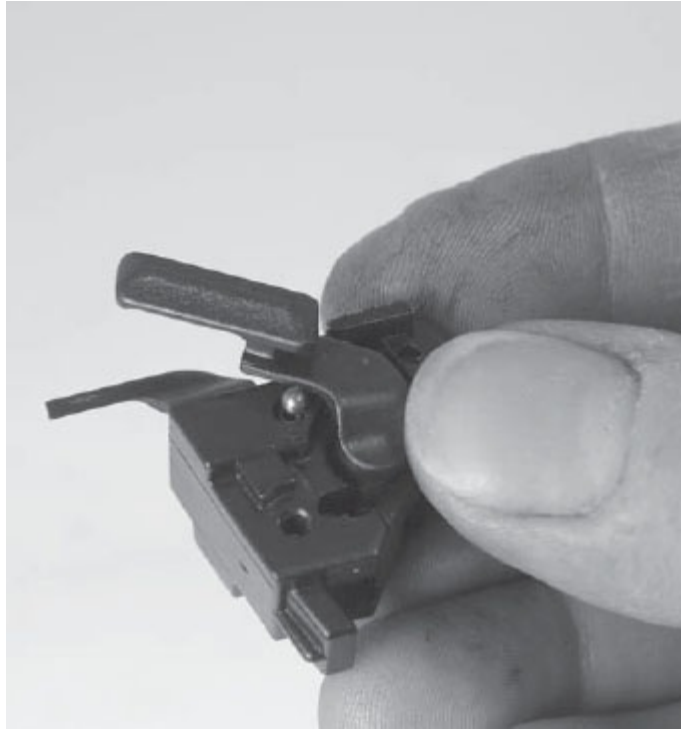
17. Pull the two support blocks up and out of the frame. The front support block which encircles the trigger can simply be pulled off of the trigger, which stays with the rear support mechanism.



18. Rotate the trigger down and pull it from the rear support structure.



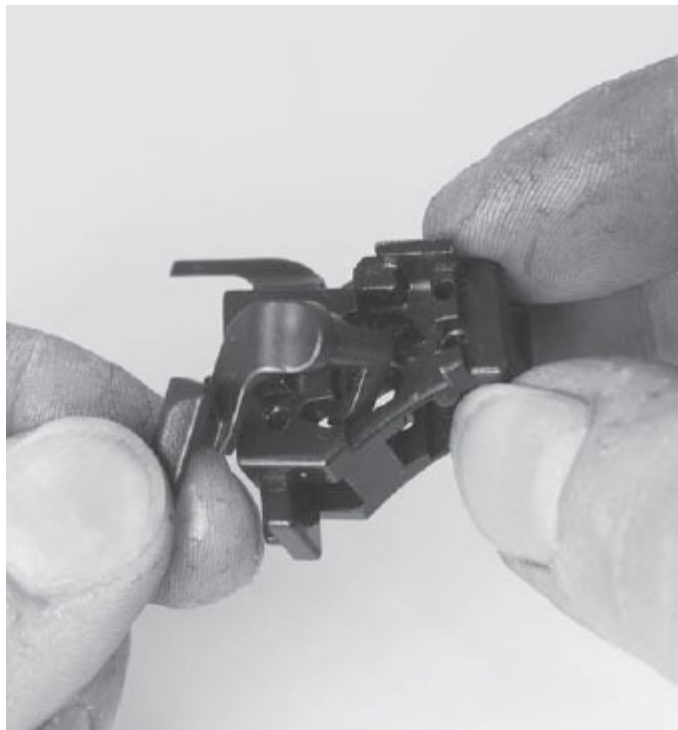
19. Remove the disconnecter.



20. Remove the safety detent ball and spring at this time. They are right beneath the safety arm.



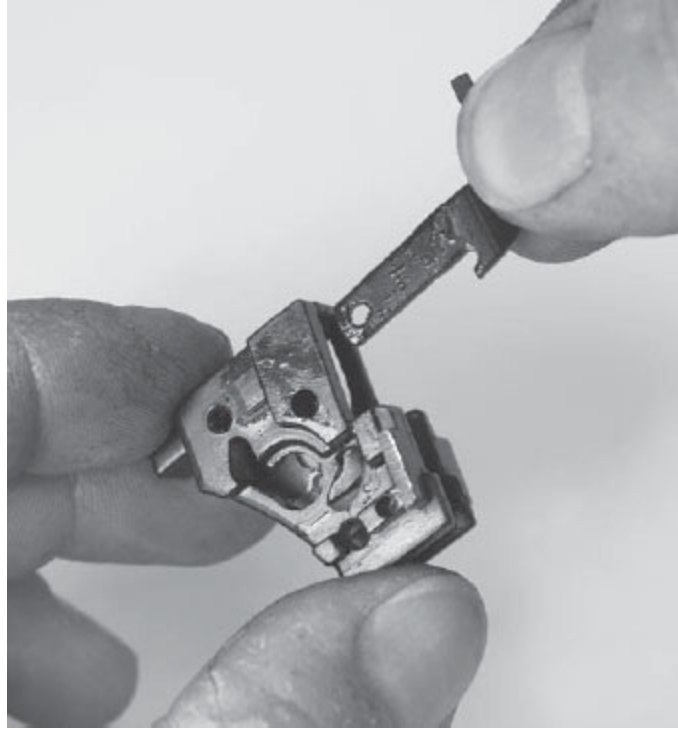
21. Press out this pin to release the sear and sear spring. The sear will remain in the housing until the manual safety is removed.



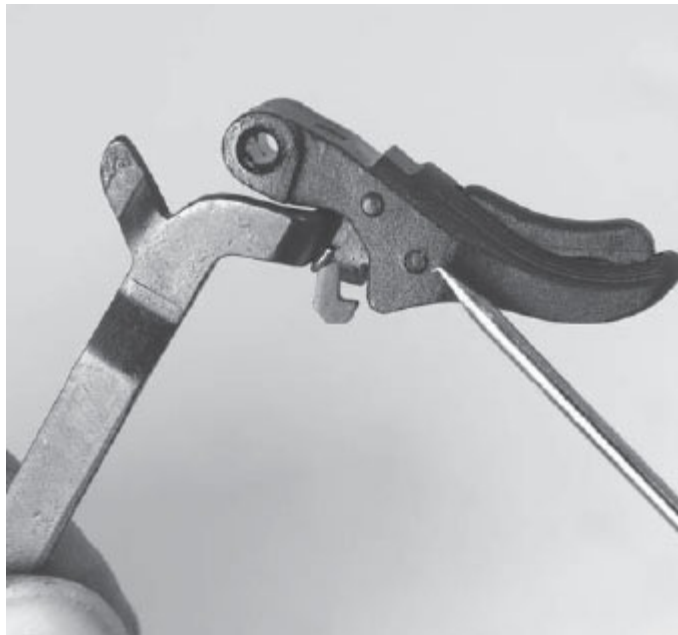
22. The safety can be removed by aligning it with the slot, tilting it forward and pulling it out.



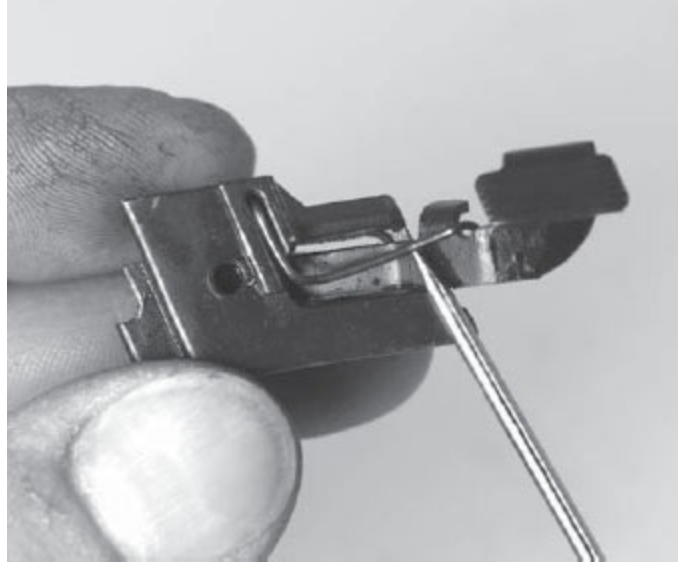
23. Remove the sear by pulling it down.



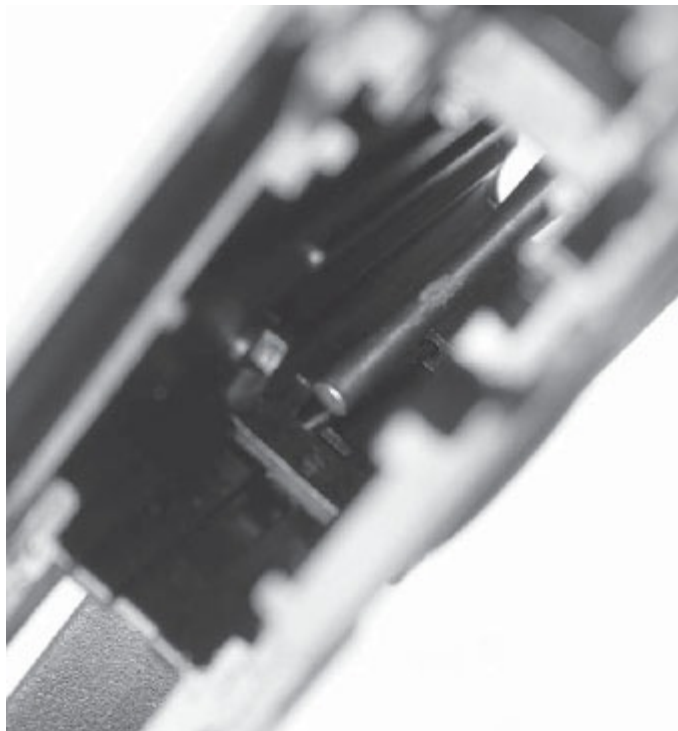
24. Pull the ejector up and out of the support housing.



25. Driving out this pin should only be done if the trigger bar needs to be replaced. It will release the trigger bar and trigger bar spring. The pin above retains the trigger safety.

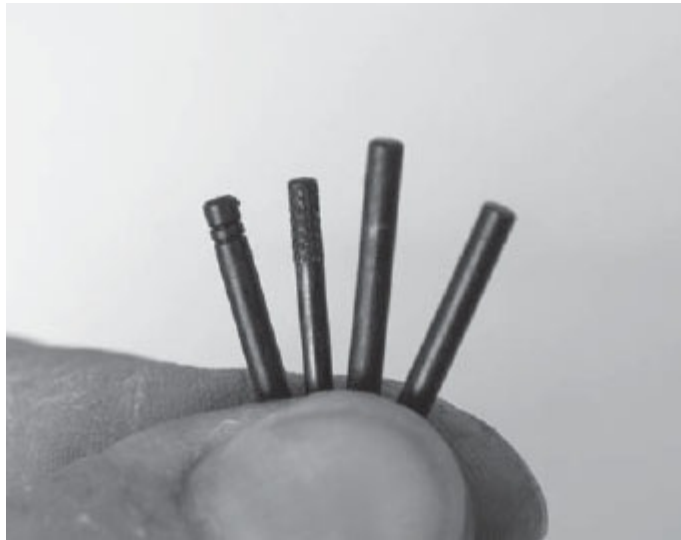


- 26.** To free the slide stop, unhook this spring and pull the slide stop out of the rear of the forward housing.

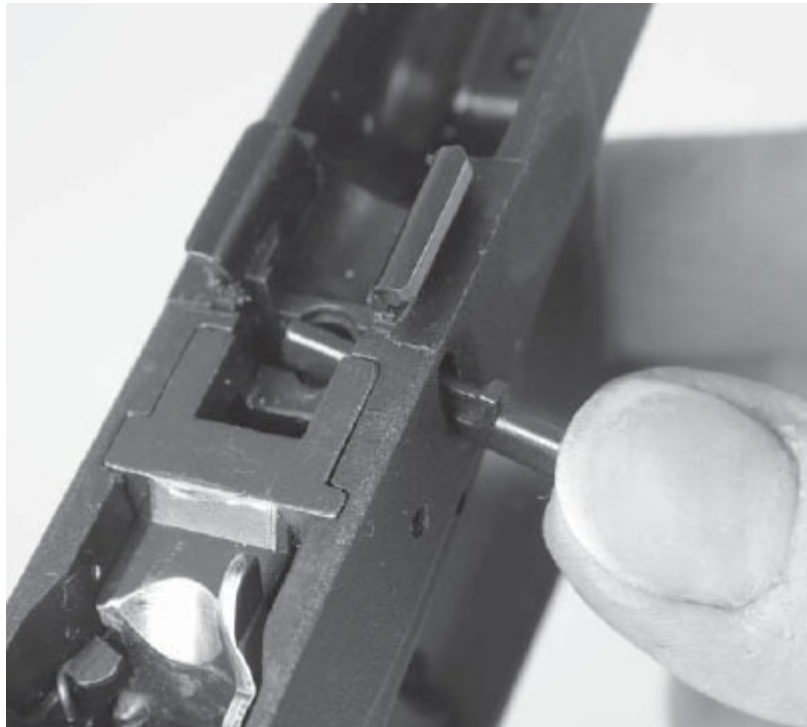


- 27.** To disengage the magazine catch spring, use a tool to reach in just below the magazine catch and push the magazine forward into the frame. Then push the magazine catch out to either side.

Reassembly Tips:



1. The four pins in the frame are all different. In order from back to front: rear-most is the pin with two grooves; next the pin with knurls; next, the long smooth pin and just in front of the trigger is the short smooth pin. **Note:** These should all be driven in from the left.



- 2.** When reinstalling the disassembly latch, the depressed should be facing to the rear.

Walther P22

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the P22 also apply to the following gun:

Walther P22 Target



Data: Walther P22

Origin: Germany

Manufacturer: Carl Walther GmbH,
Germany

Cartridge: .22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 6.3 inches

Height: 4.5 inches

Barrel length: 3.42 inches

Weight: 15.1 ounces

When the Walther P22 was introduced, a lot of folks were wondering if this gun was made for beginning shooters of the younger variety because the pistol grips were so small. Larger fisted fellows often don't have enough room for all four fingers, even with the optional larger backstrap installed. This very lightweight double action handgun is however very suitable in size, caliber, and cost for young adults or older children to learn marksmanship and firearms handling. It can be purchased with a 3-inch barrel or optional 5-inch target barrel. More recent design changes have made cosmetic alterations to the texture of the pistol grip and to the cross section of the slide, making it even more visually attractive. A threaded muzzle also allows the use of muzzle devices in those states where they are legal. Finishes other than black, including silver and camouflage, can also be purchased. The P22 is imported by Smith & Wesson.

Field Strip:



1. With the pistol unloaded and the magazine removed and the hammer cocked, grasp the takedown lever with thumb and forefinger and pull straight down until it disengages.



2. Pull the slide to the rear until it stops. Then lift it up and off the

frame and pull it forward until it clears the frame and barrel.
Note: *The recoil spring is under tension and should be controlled when the slide is removed.*



3. The barrel can be removed by removing the lock nut/thread protector from the muzzle, pulling the barrel sleeve off the barrel, and then pulling the barrel out of the frame toward the rear.



Walther P22 field stripped

Detail Strip:



4. Drift this pin out from top to bottom to release the extractor and extractor spring.



5. Remove the screws from both safety levers.

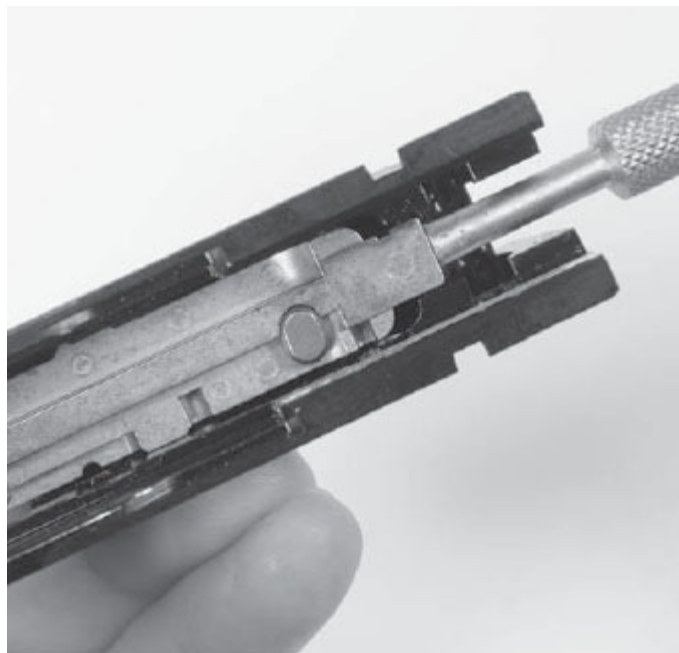


6. To remove the safety barrel, the firing pin must be depressed as

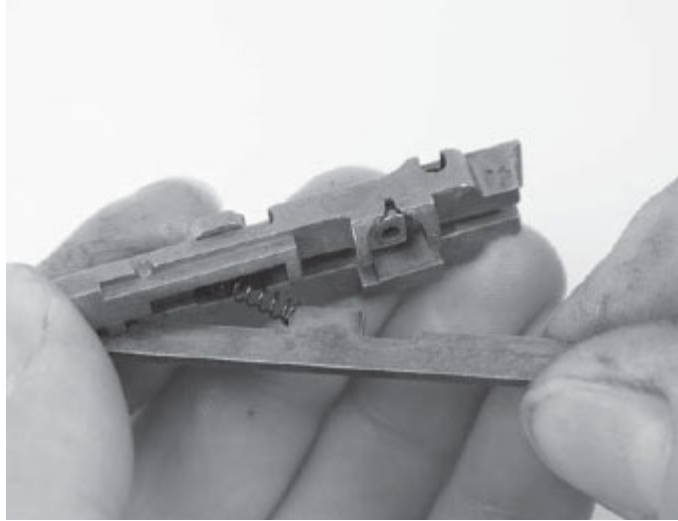
far forward as possible. Then push it out to either side. The firing pin is still contained by the firing pin safety.



7. Drive out this roll pin to remove the internal housing.



- 8.** The firing pin housing should then be gently tapped forward and it can be removed by lifting it up and out of the slide. The very small firing pin safety spring will drop free at this point.



- 9.** The firing pin and spring can now be lifted straight up and out as well as the firing pin safety.



- 10.** Drive out this pin to remove the back strap. The slide stop and slide stop spring will fall free.

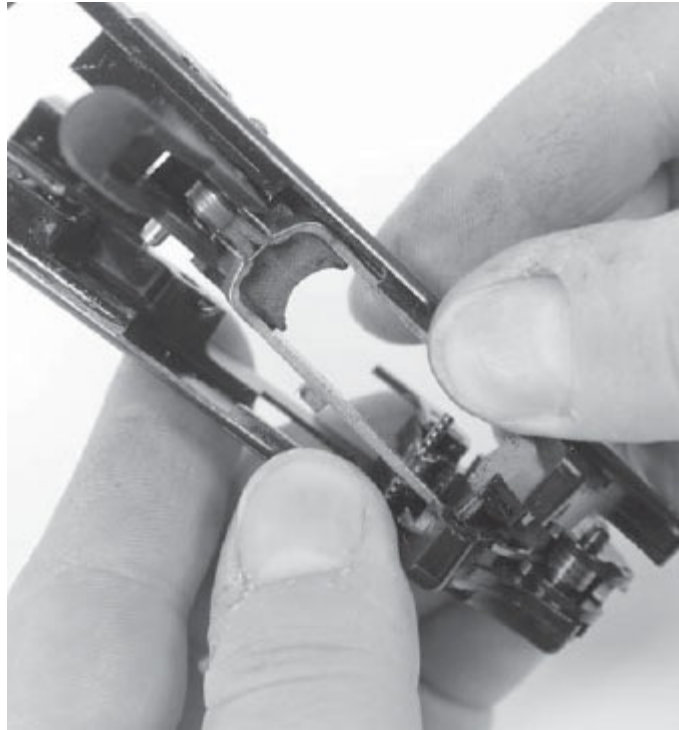


- 11.** Drive out these two pins to remove the trigger housing from the frame.

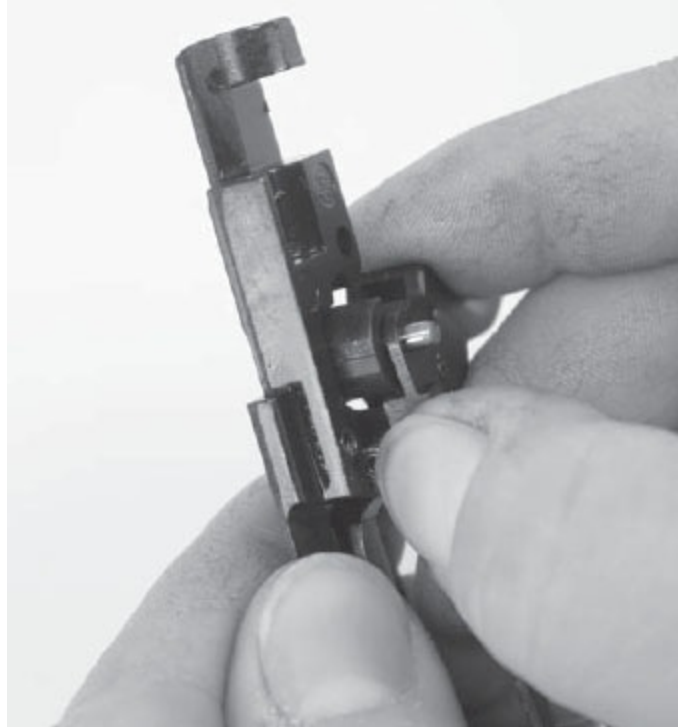


- 12.** There are two Phillips-head screws on the right side of the receiver. Remove these and gently separate the two halves of the

receiver. The front screw is longer.



- 13.** When separating the two halves, the hammer will likely stay on the right side and the trigger will stay attached to the left side. Gently work the trigger bar out from behind the hammer lever.



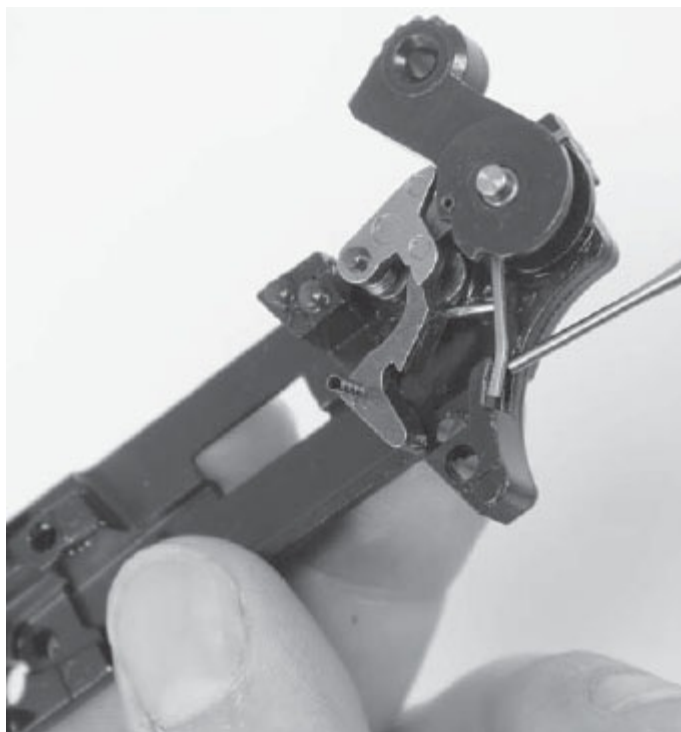
- 14.** To remove the trigger, depress the dual magazine safety spring and wiggle the entire trigger assembly off of the pin. At this point the flat magazine safety will fall off of the trigger.



- 15.** The trigger bar and trigger return spring, if necessary for repair, can be removed by pressing out this roll pin.



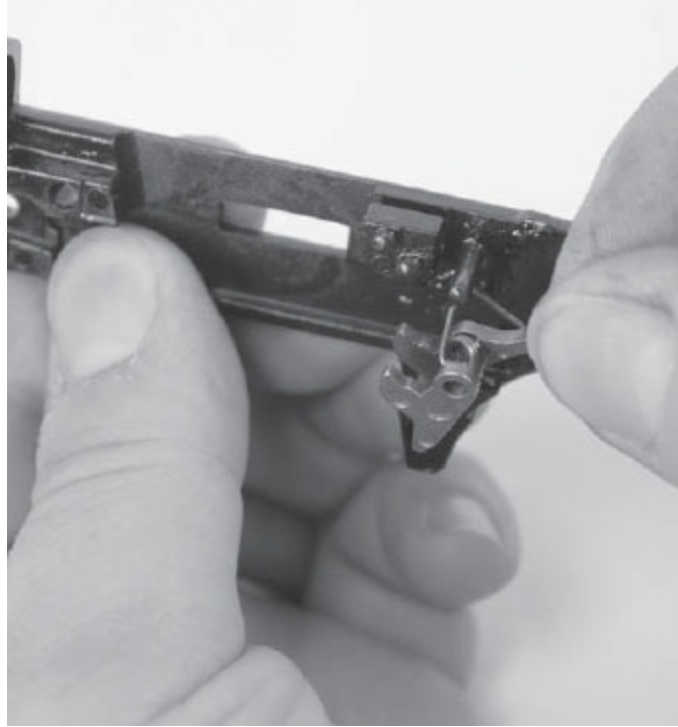
16. Remove the ejector by pulling it off the two small knobs on which it rests.



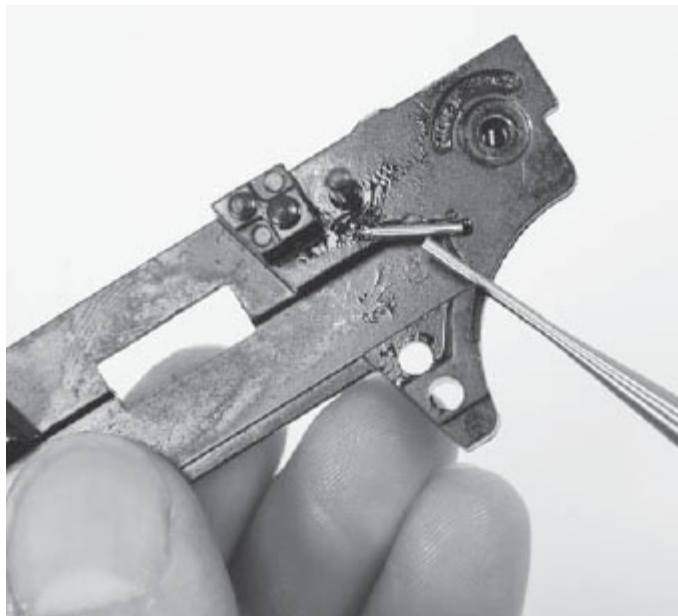
- 17.** Release the hammer spring tension by nudging this hammer spring leg off of the ledge.



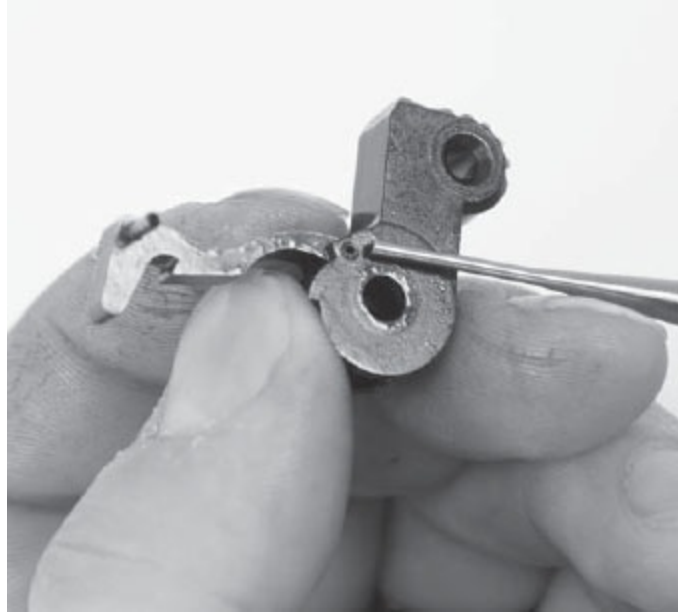
- 18.** To remove the hammer, jiggle it until its pin clears the hole on the right side of the receiver. While you are doing this, press down on the front of the sear to control it. The hammer will then pull straight out.



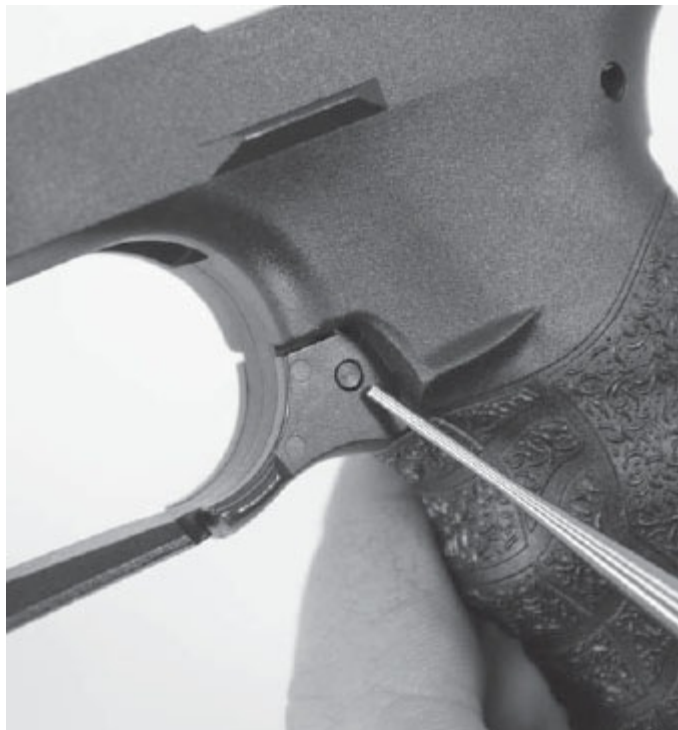
- 19.** The sear, now free of tension, can be lifted off of its pin. **Note:** The sear spring is loose in the sear and will fall out.



- 20.** These steel plates on either side of the receiver are staked in place and do not need to be removed.



21. Driving out this pin will allow you to replace the hammers arm. If necessary for repair, the pin at the front of the hammers arm can be drifted out and replaced.



22. Drive out this pin to free the magazine catch and spring.



- 23.** If it is necessary to replace the takedown lever, this pin must be pried out of its place so that the lever can be pulled straight down and into the trigger guard.

Reassembly Tips:



- 1.** When replacing the housing in the slide, insert the firing pin safety spring into its hole and place the housing straight up into

the slide, compressing the spring. The housing can then be pushed back into place with finger pressure. Test the firing pin safety to ensure the spring is placed correctly and not kinked.



2. Hold the sear in this position compressing it forward. Note that the sear spring has one slightly longer leg and one slightly shorter leg. The longer leg should bear against the receiver. As you are installing the hammer, place the hammer arm through the sear and slide it onto the receiver until the hammer pin can depress into the hole in the receiver.



3. The rear roll pin which holds in the trigger housing is slightly shorter than the front pin. If the front pin is placed in the rear pin hole, it will stick out both sides.



4. The recoil spring can easily be kinked when replacing the slide back onto the frame. You may need to use a tool to partially compress the spring onto the guide rod to ease installation.

Walther P-38

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Walther P-38 also apply to the following guns:

Walther P1

Walther P4

Walther P-38K



Data: Walther P-38

Origin: Germany

Manufacturer: Carl Walther,
Waffenfabrik,
Zella-Mehlis, and other
wartime manufacturers

Cartridge: 9mm Luger (Parabellum)

Magazine capacity: 8 rounds

Overall length: 8 7/16 inches

Height: 5 3/8 inches

Barrel length: 4 9/10 inches

Weight: 34 ounces

Adopted in 1938 as military standard to replace the Luger, the P-38 was made from that year through the end of World War II. In 1957, the relocated Walther factory at Ulm/Donau resumed production of the pistol for commercial sale and for use by the West German forces. The postwar pistols have slight design differences from the earlier guns, and not all parts will interchange. The instructions here apply to the standard prewar and wartime version.

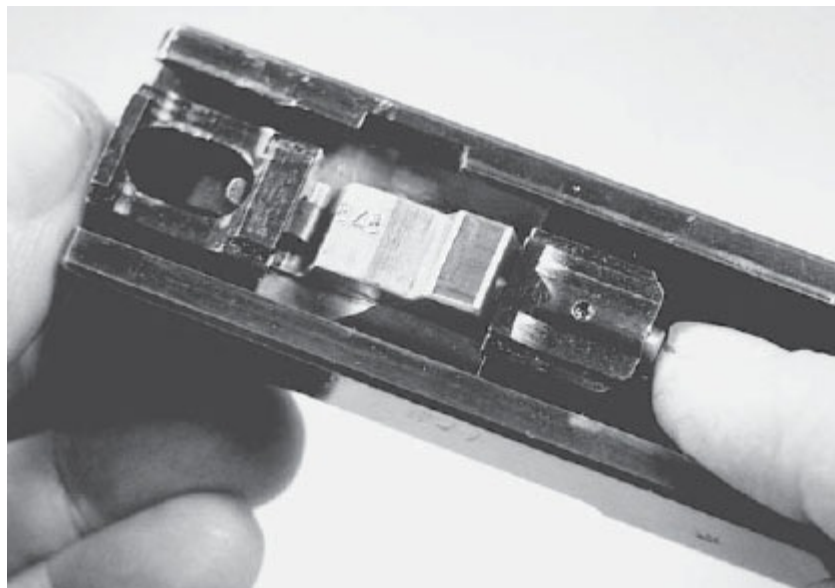
Field Strip:



1. Pull back the slide until it locks open and remove the magazine. The takedown-latch is at the front of the frame on the left side. Turn it down and forward until it stops.



2. Holding the slide against the tension of the recoil springs, release the slide-latch and allow the slide to move forward until its back edge is even with the top of the frame, in normal closed position. Pull the trigger and ease the hammer down, then run the slide and barrel assembly forward off the frame.



3. Push in the plunger at the rear of the barrel underlug to tip the locking block out of its recesses.

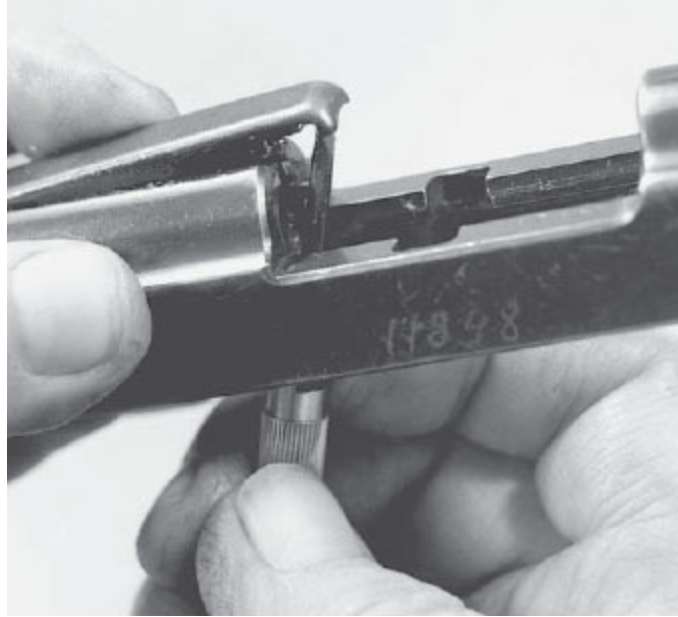


4. Slide the barrel forward out of the slide. **Gun is now field-stripped.**

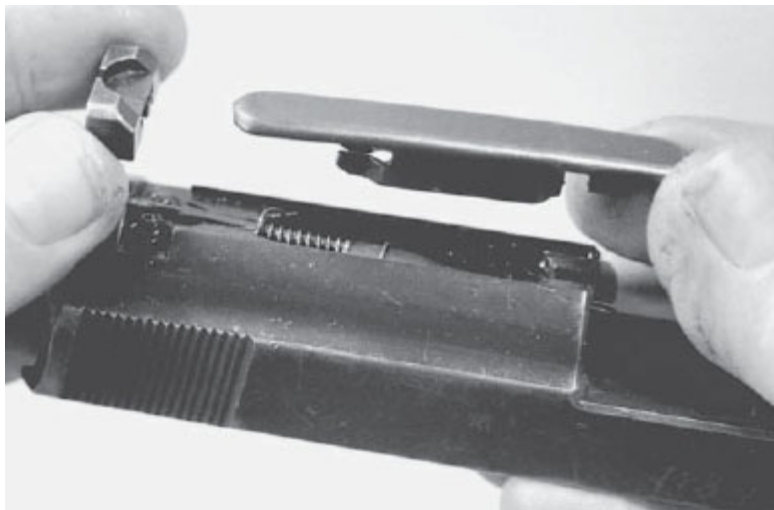


Walther P-38 field-stripped

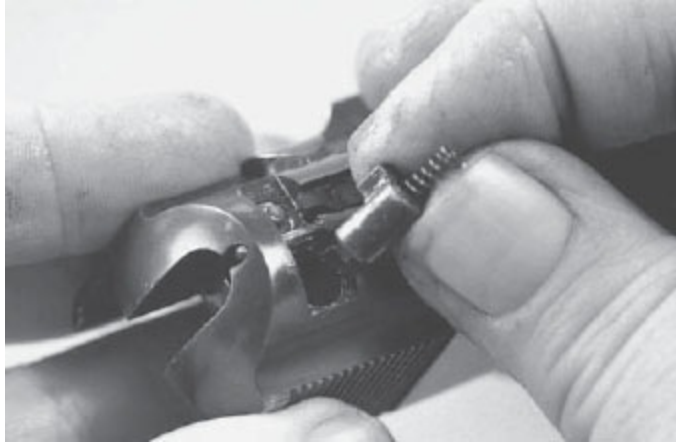
Detail Strip:



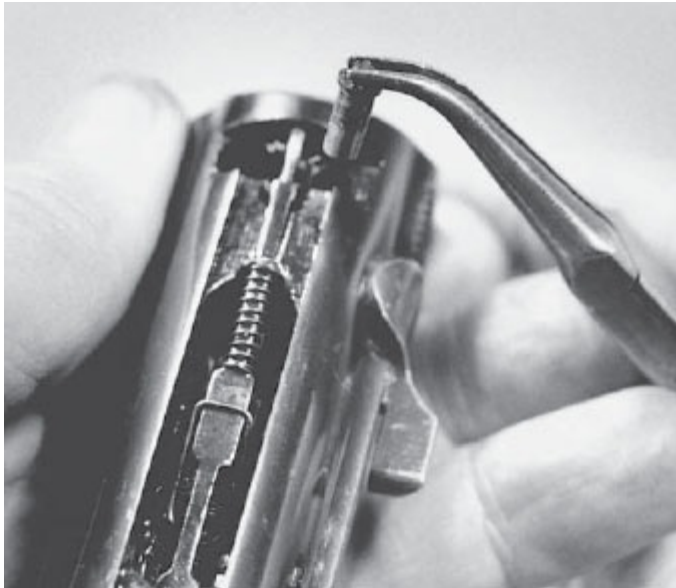
5. With a screwdriver of appropriate size, force the slide top cover up and lever it forward.



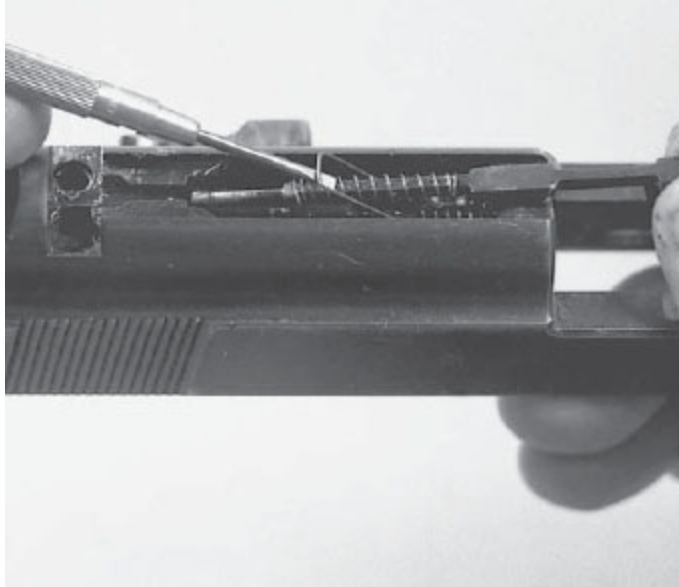
6. Remove the slide top cover. This will also release the rear sight for removal.



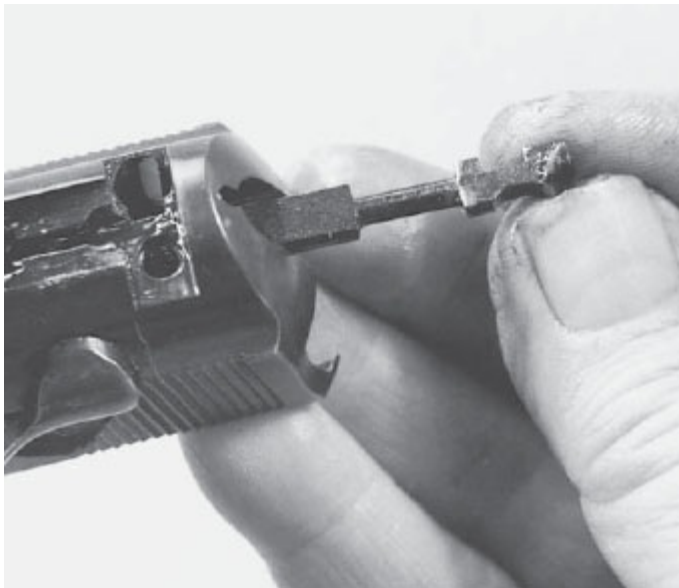
- 7.** Remove the firing pin lock and its spring from the top of the slide.



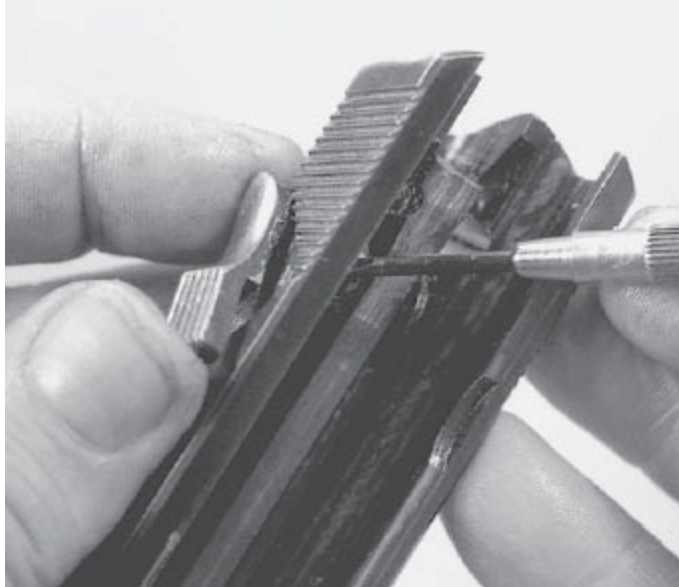
- 8.** With pliers or forceps, remove the firing pin retainer from the top of the slide.



- 9.** Use a small tool to lift the upper yoke of the firing pin spring, and remove the cartridge indicator and its spring up and forward.



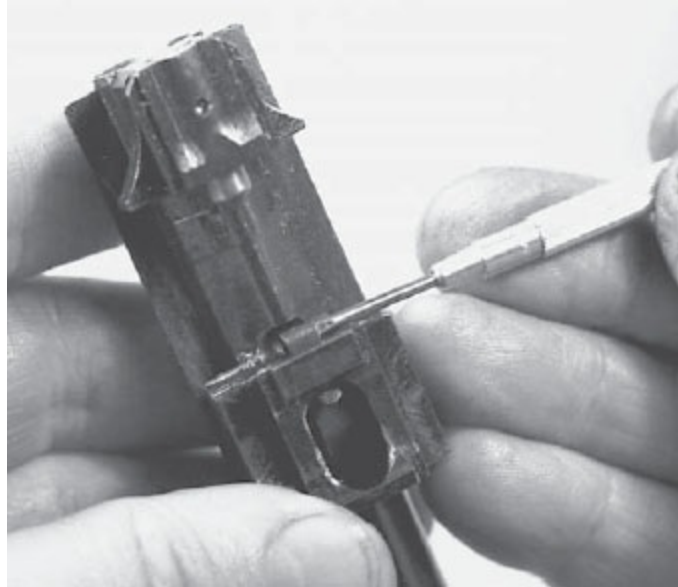
- 10.** Remove the firing pin from the rear of the slide. **Note:** Safety must be in the off-safe position. The firing pin spring can now be lifted out of the recess in the top of the slide.



- 11.** With the safety-lever set between its two positions use a small screwdriver to nudge it toward the left for removal. With the safety out, tension is relieved on the combination spring which powers the safety and extractor, and the extractor can be removed from the left side of the slide. The spring and its two plungers can then be removed forward from the extractor recess.



- 12.** Turn the locking block out beyond its normal unlocked position, and remove it from the barrel.

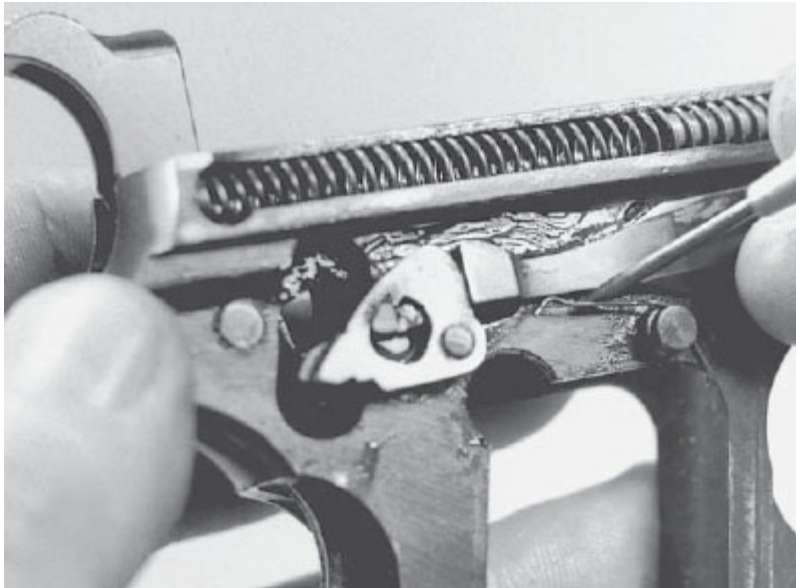


- 13.** The locking block spring can be removed by inserting a small tool through its loop and levering it toward the rear. The locking block plunger is staked in its tunnel at the rear of the barrel. It can be driven out toward the rear, but routine removal is not advisable.

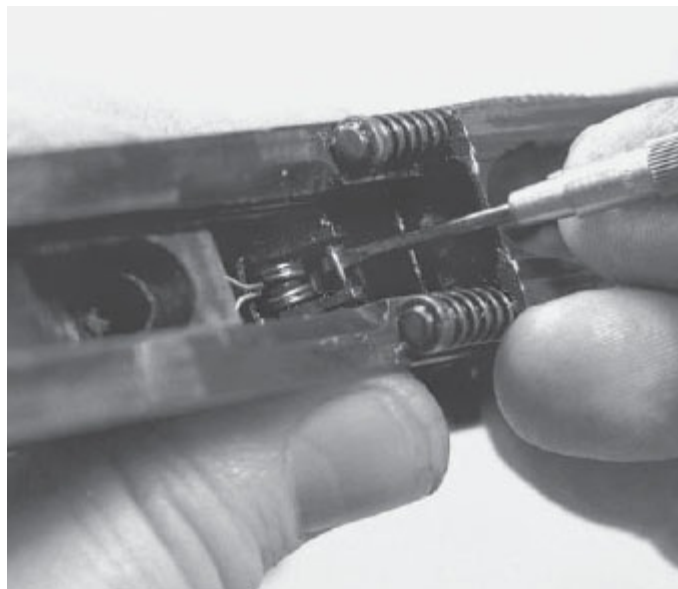


- 14.** To remove the takedown-latch, turn it straight down and move it toward the left and out of the frame. **CAUTION:** *The takedown-latch plunger and spring may be released as they clear the right end of the latch cross-shaft, and the little spring is quite strong.* The plunger is usually staked in place at the top, inside the frame, and there is an access hole which allows the plunger to be depressed or detained with a small screwdriver. If the spring is particularly

strong, it is advisable to use this method, holding the plunger down while removing the latch. After the latch is out, the access hole will allow the plunger to be drifted out forward, but routine removal is not advisable.



- 15.** Detach the rear arm of the trigger bar spring from its groove in the bottom of the bar and remove the spring from its stud on the frame.



- 16.** With a small screwdriver, lift the rear loop of the trigger spring from its engagement with the trigger bar pivot, and move the forward part of the trigger bar out toward the right.

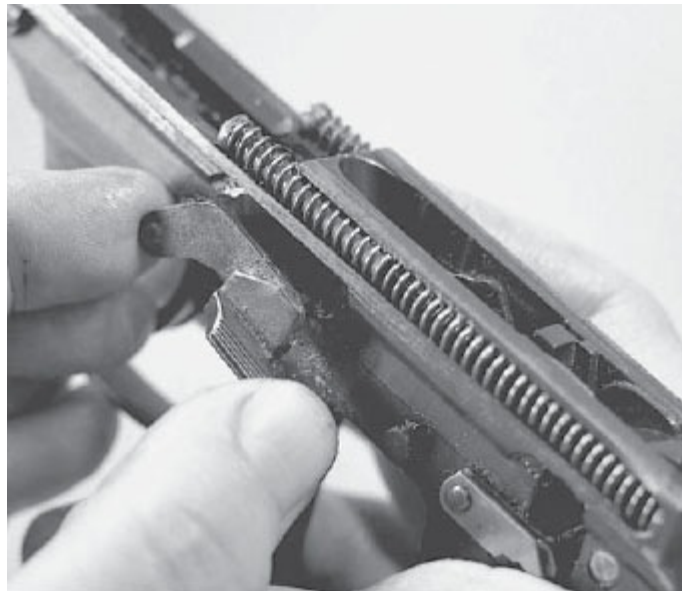


- 17.** Disengage the rear hook of the trigger bar from the right wing of the sear, and remove the bar from the frame.



- 18.** Lift the rear arm of the sear/slide-latch spring from its groove in the top of the sear, and move the spring off its stud on the frame.

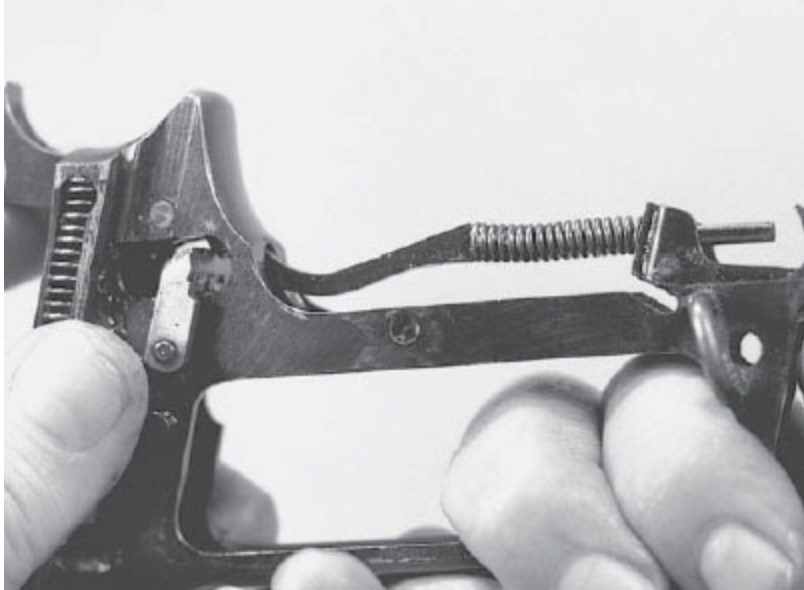
Then take it off toward the rear, pulling its forward arm from the hole in the slide latch.



19. Move the slide-latch to the left and remove it from the frame.



20. Removal of the slide-latch will free the trigger, trigger spring, and spring bushing for removal from the top of the frame. Pushing out the bushing will free the trigger spring.



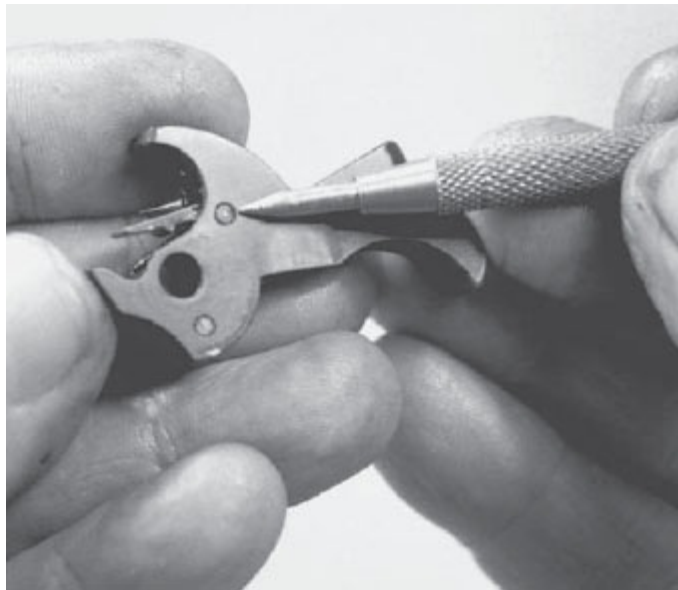
- 21.** With the hammer at rest (in the fired position) push up on the magazine catch to move its cross-pin out of the retaining recesses in the backstrap, and ease the catch off downward. **CAUTION:** *Even with the hammer at rest, the hammer spring is under tension. Be careful!*



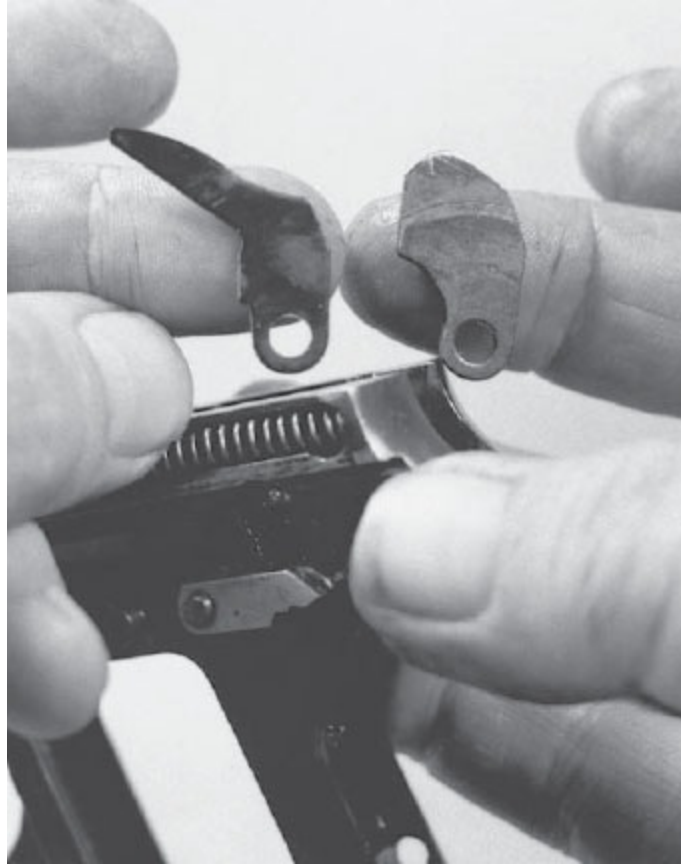
- 22.** Removal of the magazine catch will free the hammer spring and hammer strut for removal downward.



- 23.** Push out the hammer pivot and remove the hammer from the top rear of the frame.



- 24.** Drifting out the cross-pin at the front of the hammer will release the double-action lever and its spring for removal. Pin at the rear is the bearing point for the top of the strut, and need not be removed.



- 25.** When the hammer is removed, the firing pin lock lever and hammer-drop lever will be released for removal from the top of the frame. They are located on each side of the hammer as shown—the hammer-drop on the left, the firing pin lock on the right.



26. Push out the sear pivot pin and remove it from the frame.



27. The ejector is released by removal of the sear pivot pin, and is removed from the top of the frame.



- 28.** Rotate the sear to align its left arm with the vertical oblong opening in the frame, and move the sear out toward the right side of the frame.



- 29.** Use a small screwdriver to depress each of the two recoil springs, inserting the screwdriver tip a few coils back from the front, until the spring plungers can be tipped and removed from the side channels in the frame. **CAUTION:** *Keep the frame pointed away from your face during this operation in case the springs get away.* After removal of the plungers, ease the springs out forward.

Reassembly Tips:

The slide top cover can usually be pressed back into place by hand. In some cases, it may be very tight and could require a light tap with a nylon hammer to seat it.

When replacing the safety-lever, use a small tool to depress the spring plunger and ease entry of the safety cross-piece.

When replacing the trigger bar, remember to lift the rear loop of the trigger spring and be sure that it engages the groove on the trigger

bar pivot.

When replacing the slide on the frame, be sure the hammer is in the lowered position and the locking block on the barrel is in the fully-locked position to clear the edge of the frame. At the rear, be sure the ejector is tipped forward into the magazine well to clear the rear of the slide. When the slide is in normal position, even with the rear of the frame, insert the magazine and cock the hammer. Then draw back the slide to the open position and turn the takedown latch back toward the rear until it locks.

Walther PPK/s

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the Walther PPK/s also apply to the following guns:

Walther PP

Walther PPK/s American

Turkish MKE

Walther PPK

Manurhin PP

Walther PPK American

Manurhin PPK/s



Data: Walther Model PPK/s

Origin: Germany

Manufacturer: Carl Walther,
Waffenfabrik,
Ulm/Donau,
West Germany

Cartridges: 22 L, 32 ACP, 380 ACP

Magazine capacity: 22—10 rounds,
32—8 rounds,
380—7 rounds

Overall length: 6 1/8 inches

Height: 4 3/4 inches

Barrel length: 3 5/16 inches

Weight: 23 ounces

Of the two original Walther double-action medium-frame autos, the smaller Model PPK was easily the most popular. Its compact size, high quality, and absolute reliability made it a favorite with those who legally carry concealed arms. In 1968 the U.S. government prohibited importation of the PPK because it was 1/10-inch below the minimum in vertical measurement under their rules. The Walther people were equal to the challenge—they simply mated a PP frame to a PPK slide and barrel, and the PPK/s was born. The PPK was later made in the U.S. by Interarms. For several years, Manurhin of France also made the Walther PP in 22 Long Rifle, 32 ACP, and 390 ACP. The instructions will apply to all of the pistols of this basic Walther pattern.

Field Strip:



1. With the magazine removed and the hammer cocked, pull down on the front of the trigger guard.



2. While holding the guard in the lowered position, draw the slide all the way back and lift it at the rear to clear the barrel. Then run the slide forward off the barrel and frame, and remove the recoil spring from the barrel. **Gun is now field-stripped.**



**Walther PPK/s
field-stripped**

Detail Strip:



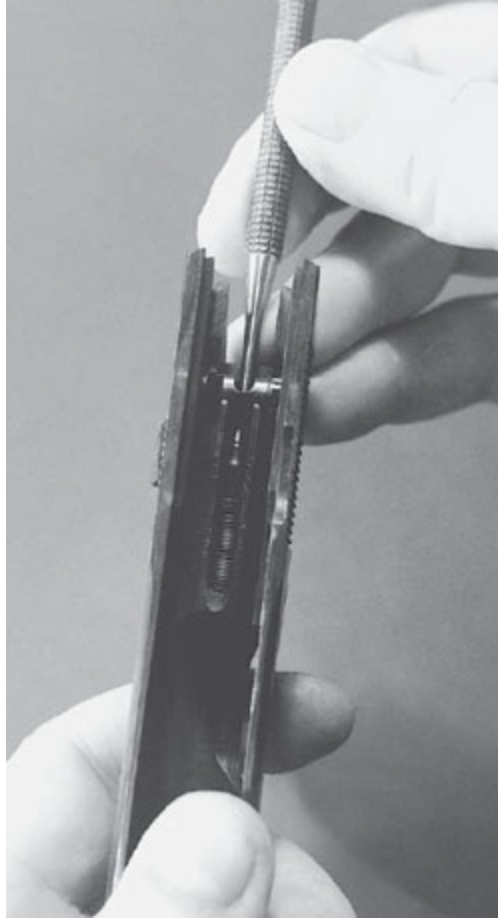
- 3.** With the grips removed, use a small screwdriver to depress the ejector/hold-open spring and ease it out of its shelf on the frame. The ejector/hold-open unit can then be lifted off to the left.



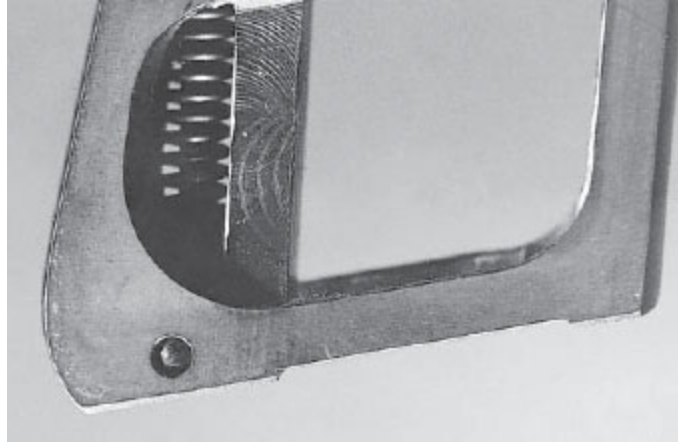
4. On early Walther pistols, the famous “horseshoe sear” is released by taking out the pivot studs, one on each side. On current production guns, the pivots are tightly press-fitted in place, and removal is not easy, nor is it recommended in normal takedown. Drifting out the large pin at the upper rear of the frame from right to left will release the hammer and hammer spring. The spring is under tension, so ease it out.



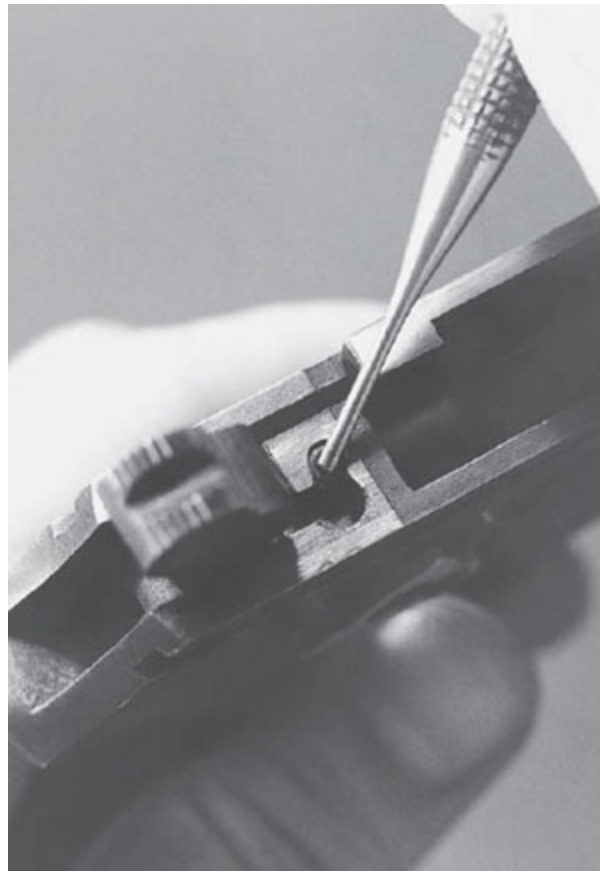
5. Drifting out the trigger pin will release the trigger, and also allow removal of the trigger spring and the trigger bar/disconnector. The latter part must be moved down and forward to clear its shelf on the frame, then is removed to the right. The upper pin retains the barrel, but these are tightly fitted at the factory, and removal is not recommended. Removal of the lower pin will release the trigger guard, its spring and plunger, and the magazine release and spring.



6. A small screwdriver can be used to push the firing pin forward, working against the exposed rectangular block on its underside, but I prefer the method shown in the photo, as it combines two operations. Use a small drift to depress the firing pin ahead of the safety, set the safety-lever between its two positions, and use the side of the drift to nudge the safety out toward the left side.
CAUTION: *The spring is under tension.* The extractor and its attendant spring and plunger can now be removed.



7. Removal of the pin at lower rear of the grip frame will release the frame plug, and is a way of relieving hammer spring tension.
CAUTION: *If the hammer is still in place when the plug is removed, the spring will be under tension.* The hammer can be removed and replaced, though, without taking out this plug.



8. To remove the hammer block, depress the spring lock, visible at the top of the frame and tip it to the right (with the hammer at rest, as shown), then remove the follower and spring. Cock the hammer, invert the gun, and shake out the hammer block.

Reassembly Tips:

When replacing the safety in the slide, use a small screwdriver against the rectangular block on the underside of the firing pin to depress the firing pin, and another small screwdriver to depress the plunger of the safety spring, inside the slide on the right side. A third hand will be helpful.

When replacing the trigger, spring, and the trigger bar, the arm of the trigger spring which powers the trigger bar must be engaged with the stud on the bar by working with a small tool through the opening for the ejector/hold-open on the left side. A third hand is also helpful here.

Note that the recoil spring is larger at one end than the other. The larger end goes toward the front of the slide.

The trigger pin, trigger guard pin, and frame plug pin are all of similar dimensions, but have different configurations and will not work interchangeably. Keep each with its part, and take care not to get them mixed.

Walther SP-22

Similar/Identical Pattern Guns

The same basic assembly/disassembly steps for the SP-22 M-3 also apply to the following gun:

Walther SP-22 M-1

Walther SP-22 M-2

Walther SP-22 M-4



Data: Walther PPS

Origin: Germany

Manufacturer: Carl Walther GmbH,
Germany

Cartridge: .22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 9.65 inches

Height: 4.8 inches

Barrel length: 6 inches

Weight: 27.2 ounces

The SP-22 is Walther's newest entry into the rimfire target pistol market. It has a unique bilateral cocking lever around the front sides of the pistol and an interchangeable pistol grip. The modular nature of the pistol, in addition to the exchangeable pistol grip, includes removable accessory rails on the top of the pistol and the underside in front of the trigger, allowing the mounting of a wide range of optics, laser, lights, or whatever the user can think of. The lower rail can be replaced with a barrel weight system to help reduce muzzle rise. The most interesting feature of this gun is a fully adjustable trigger, customizable to the shooters preference. This fully adjustable trigger is only available on the M-3 and M-4 versions. Introduced in the U.S. in 2007, it is imported by Smith & Wesson.

Field Strip:



1. Remove the magazine and close the action. Unscrew the front cap nut and remove the front cap.



2. Remove the two cocking lever screws to remove the right and left cocking levers.



3. Pull the housing forward off the frame.



4. Pull the slide all the way to the rear and lift the back end up and off the frame. The slide can then be pulled forward off the frame and barrel. The mainspring can also be removed at this time.

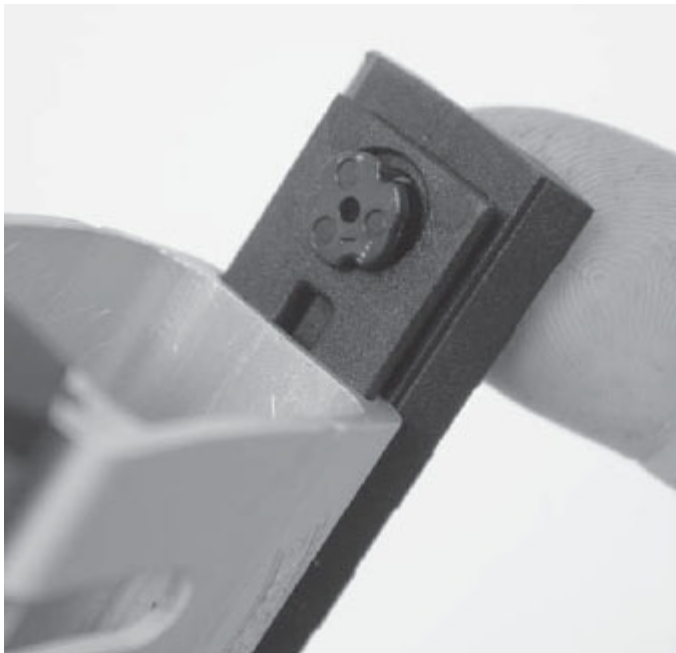


Walther SP-22 M-3 field stripped

Detail Strip:



5. The rails on the top or bottom can be disassembled by removing the flat head screws retaining them to the housing. The rails then slide out the front of the housing on its internal tracks.



6. The front sight is able to rotate to present differing thicknesses to the shooter. While removing the top rail, the front sight drops out as soon as it clears the housing.



- 7.** Drive out this pin to remove the firing pin and firing pin spring from the slide.



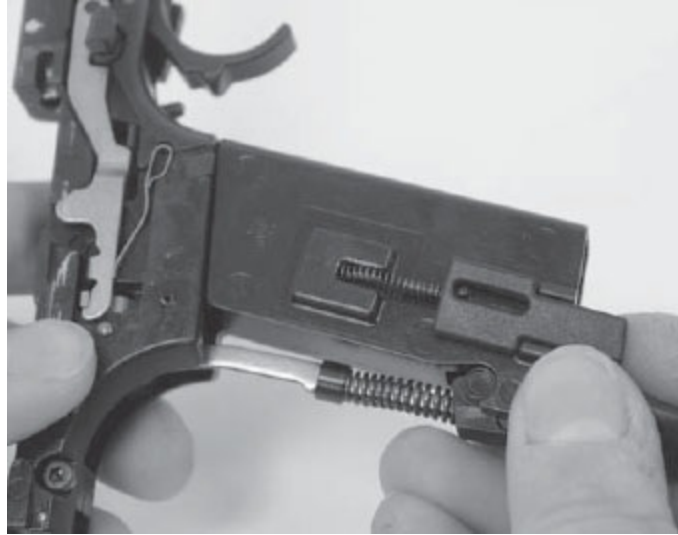
- 8.** Pull the extractor plunger back and pull the extractor from its slot.



9. Drive out this pin to remove the pistol grip.



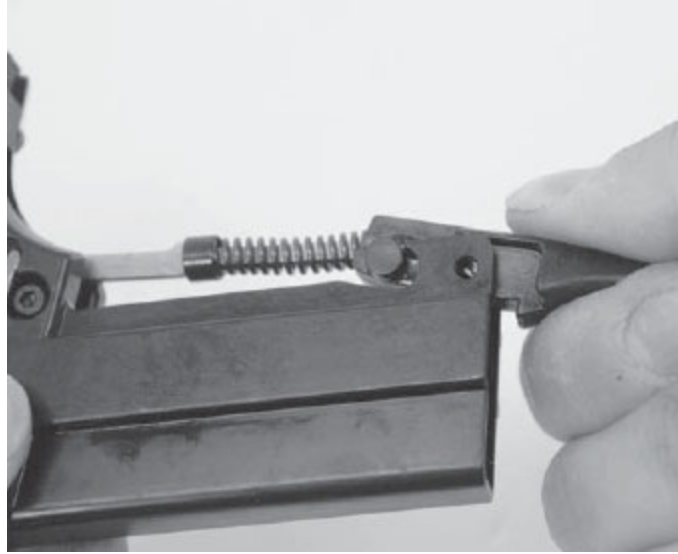
10. Depress the magazine button and pull the trigger housing out of the pistol grip.



11. Remove the magazine extractor and spring.



12. Remove the trigger bar and spring. They will lift straight up off the frame. Control the spring.



- 13.** Remove the magazine catch by pushing up and pulling out to disengage the catch from the frame. This will allow the hammer spring and bushing to fall from the hammer strut.



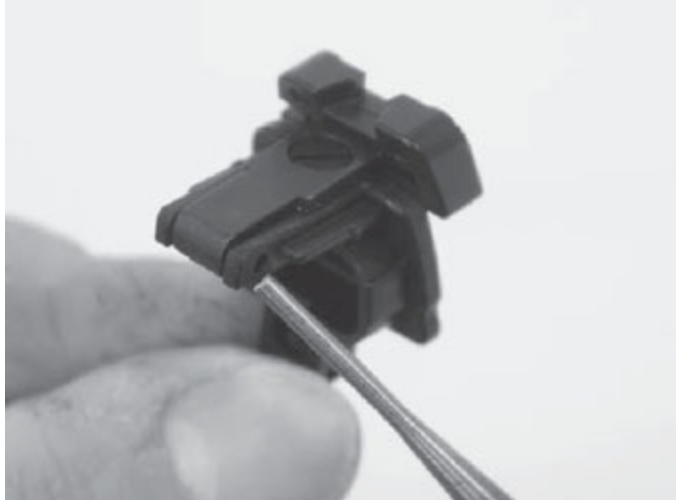
- 14.** There is a second bushing and spring inside the magazine button that can be removed if necessary.



- 15.** Drive out this pin to remove the rear cap and rear sight. The cap will remove straight to the rear.



- 16.** Beneath the rear cap is the cocked hammer indicator (red tip) and spring.



17. The rear sight can be removed by unscrewing its elevation screw and drifting out this small pin.



18. Remove the barrel nut and barrel sleeve.



19. Push the barrel out of the housing to the rear.



20. Remove the slide stop lever and spring from the left side of the frame.



21. Remove the hammer and strut by pushing out this pin.

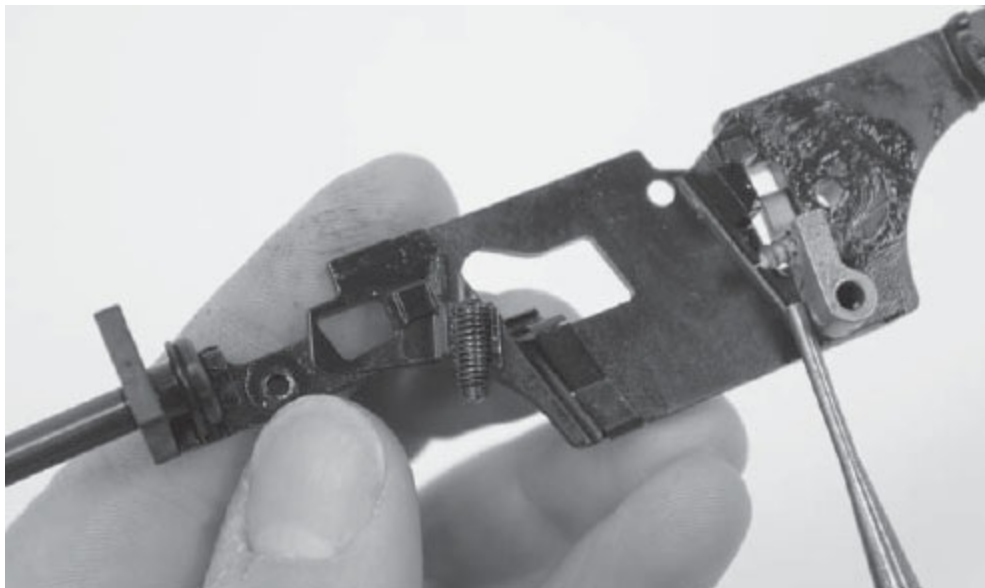


22. The screws on the left side of the housing, which hold both sides of the trigger housing together, double as the sear and trigger pins. The sear and trigger both have small coil-type springs in front of them for tension. Remove these two screws and a third,

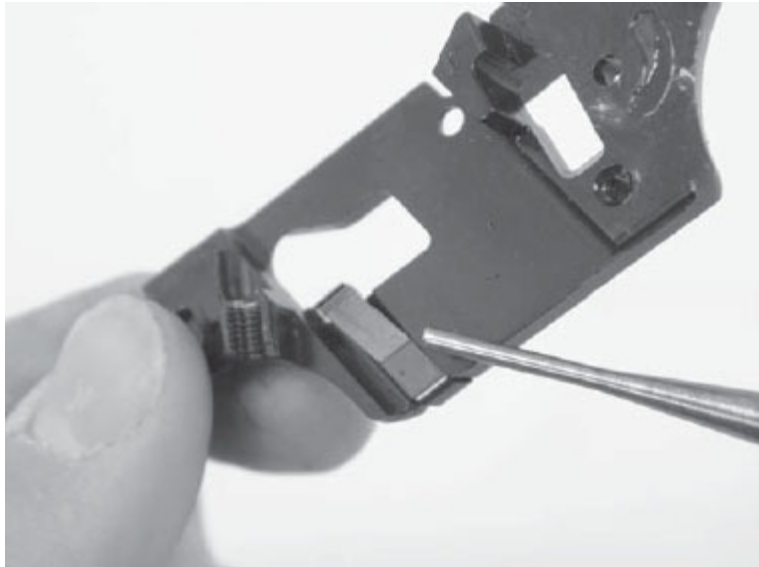
which is on the right side at the extreme back end of the housing.



- 23.** Separate the two halves of the housing. The left side will retain the trigger, safety, and safety detent. These can now be removed. *The trigger spring can really fly, so control it as it is removed.* There is a bushing in the trigger; do not lose it. The ejector is staked in place and should not be removed unless replacement is warranted.



- 24.** The right side of the housing will likely look like this. The sear and its spring at the rear is not captive and may actually adhere to the left side of the housing. The trigger adjustment screw is at the center and it would be wise to somehow note where the screw is located in its threads. The guide rod and bumper to the left can be lifted from the housing.

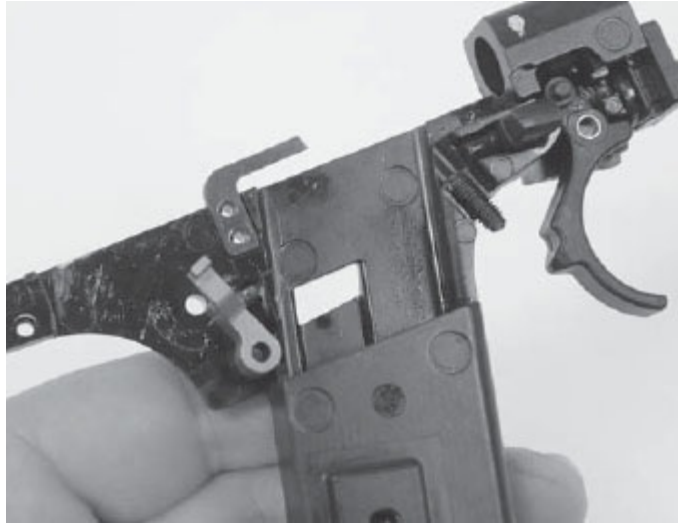


- 25.** This is the magazine safety. It is a spring clip that is removed by pulling it down off the housing.

Reassembly Tips:



1. The guide rod has a small flat on its disc. This goes “up.”



2. Place all the internals on the left side housing plate to ease assembly. The sear and trigger pins/screws should only be tightened to slightly snug. Overtightening these screws will cause malfunctions with trigger pull and hammer movement.

Walther PPS



Data: Walther PPS

Origin: Germany

Manufacturer: Carl Walther GmbH,
Germany

Cartridge: 9mm Luger

Magazine capacity: 7 rounds

Overall length: 6.3 inches

Height: 4.4 inches

Barrel length: 3.2 inches

Weight: 19.4 ounces

The Walther PPS, imported by Smith & Wesson, is clearly intended

for concealed carry. While being a full powered 9mm or .40 S&W, it is one of the thinnest subcompact handguns on the market. Like many other concealable pistols, it is shipped with a magazine with a finger extension (and extra shot capacity) and one without, one for better control and one for better concealability. Having no manual safety, it relies only on several internal safeties and, of course, the shooter exercising good trigger discipline. Measuring about one inch wide, it is a comfortable gun to carry and a simple gun to maintain. Introduced in 2007, it began appearing in numbers the following year.

Field Strip:



1. With the magazine removed, pull down on the takedown lever while pulling the slide slightly to the rear.



2. Pull the trigger and pull the slide off the front of the frame.



3. Remove the recoil spring assembly by lifting up the rear and pulling it out.



4. Remove the barrel by lifting up the chamber area and pulling the barrel out of the slide.

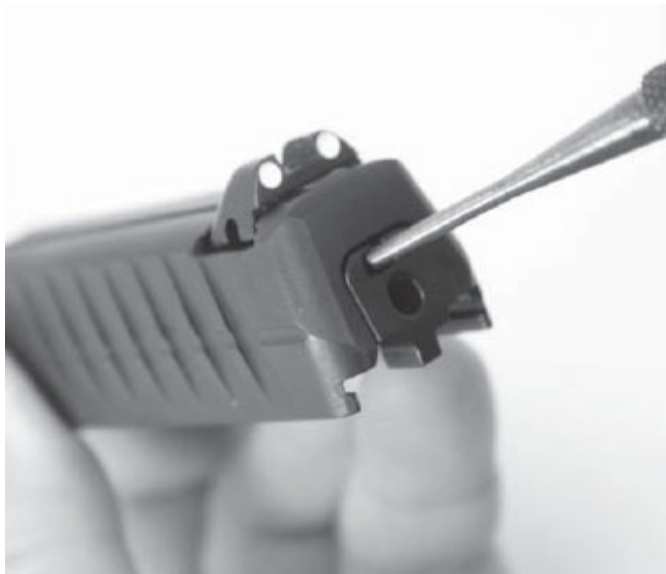


Walther PPS field stripped

Detail Strip:



- 5.** To disengage the magazine spring, gently pry it off of the tab on the magazine release. Then drive out the magazine release pin.



- 6.** Depress the small rectangular area on the back of the slide and then pull down to remove the slide plate. The striker below is under spring tension.



7. Pull the firing pin assembly from the slide.



8. To disassemble the striker assembly, compress the striker spring to expose and remove the striker cups. The spring will then come off the front of the pin and the striker guide and small striker return spring will follow.



- 9.** This pin is a spring loaded plunger. Depressing this plunger firmly will result in the extractor dislodging from the slide. This allows the extractor and spring, the plunger and its spring, and the striker safety and its spring to all be removed.



- 10.** The front sight can be removed for replacement by means of this screw.



- 11.** Drive out this pin above the front of the trigger guard. A roll pin at the rear of the frame at the top of the pistol grip should also be removed. These pins keep the trigger housing, which is essentially the pistol's receiver.



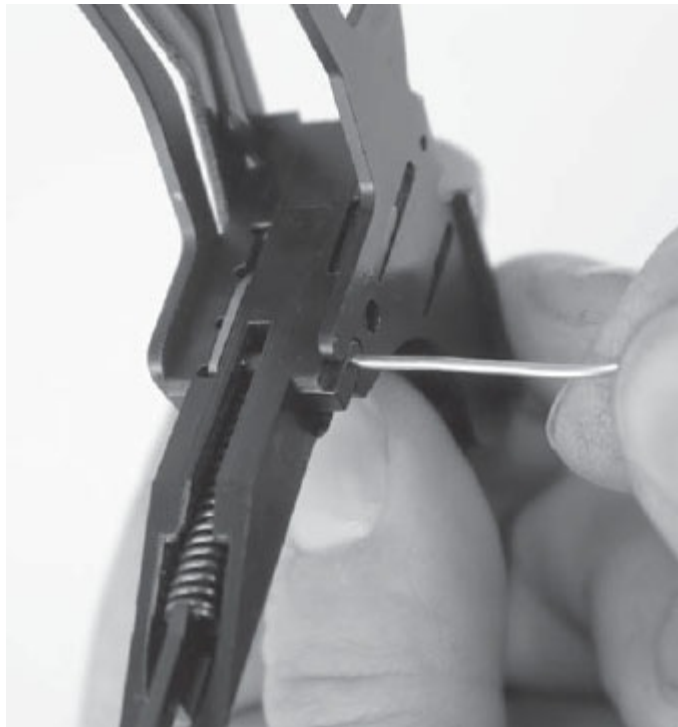
- 12.** Use a punch to depress the takedown lever spring while pushing the takedown lever out to the left in a rocking fashion.



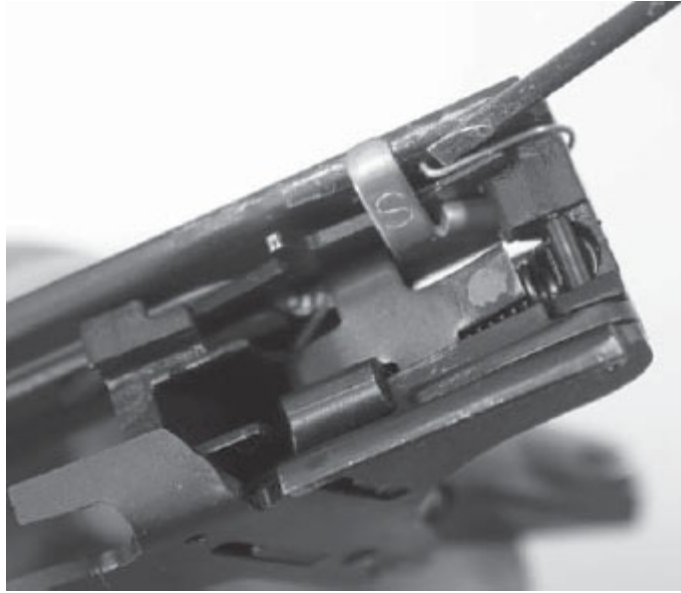
- 13.** The receiver/trigger housing can now be lifted straight up out of the frame. The slide stop and spring will fall free.



- 14.** Remove the strut assembly by pressing the point toward the muzzle until it clicks and releases the decocker and pull it out the bottom of the gun.



15. Use a thin, stiff wire to push out the sear housing pin.



16. The receiver is welded at the front with both sides open at the rear, allowing some flexibility for parts removal. First displace the retainer spring from the receiver with a small screwdriver, then remove the retainer and retainer spring from the extreme right rear of the receiver by pressing the right receiver wall out slightly and sliding the retainer out to the rear.



17. Push out the trigger pin.



18. Push out the trigger spring pin.



19. Disengage the trigger spring by prying it off of its seat.



20. Remove the trigger bar guide, which sits just on the inside of the left receiver wall. This can be removed simply by spreading the receiver sides and letting it fall out the back.



- 21.** At this point, the sear housing can be tipped forward and down while slightly spreading apart the receiver halves. This should disengage the trigger bar from the sear housing as the sear housing is pulled out the back. The trigger and the trigger bar can now be easily pulled from the bottom of the receiver.

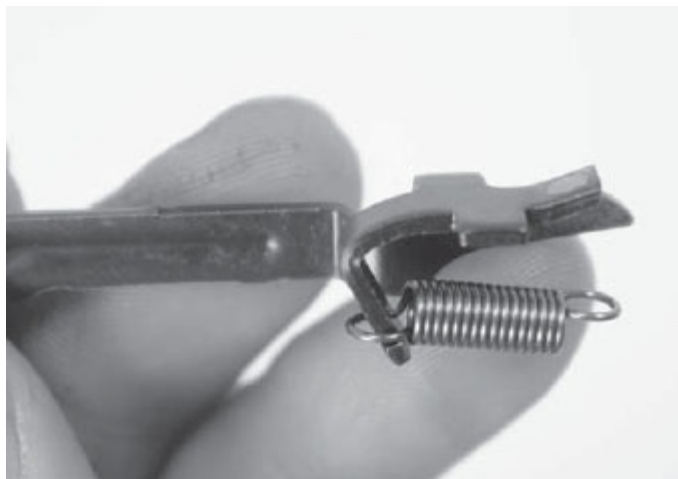


- 22.** The connector can also be pulled from the sear housing at this point.



- 23.** The trigger and trigger bar should not be disassembled as it is riveted rather than pinned. If something needs to be replaced, replace the entire part.

Reassembly Tips:



- 1.** When reinstalling the trigger, the trigger spring should be oriented this way.



2. Reinstall the trigger pin spring this far, then reattach the trigger spring to its mount. Push the pin over the spring to retain it until just before it reaches the right receiver wall. Then reinstall the keeper and keeper spring before pushing the pin all the way home.



3. Insert the takedown spring prior to reinstalling the receiver group.



4. When reinstalling the takedown lever, there is a small projection on the back. Also, insert it like this and push it in while pushing down on it from the inside. It will rock into place.

Walther TPH



Data: Walther TPH

Origin: West Germany

Manufacturer: Carl Walther GmbH
Ulm/Donau

Cartridge: 22 Long Rifle

Magazine capacity: 6 rounds

Overall length: 5¹/₄ inches

Height: 3¹/₂ inches

Barrel length: 2³/₄ inches

Weight: 11¹/₂ ounces

The elegant little Walther TPH was unimportable because of its size, and for several years it was not available for sale to the public in the U.S. For several years, a stainless steel version was made in America by Interarms. The TPH does not have the same internal mechanism as the larger Walther pistols, and the takedown differs accordingly.

Field Strip:



1. With the magazine removed and the hammer cocked, pull the trigger guard downward until its front clears the frame, and hold it there. Draw back the slide until it stops, and lift the rear of the slide upward. Remove the slide toward the front. Turn the recoil spring clockwise (front view), while pulling it forward off the barrel. **Gun is now field-stripped.**



Walther TPH field-stripped

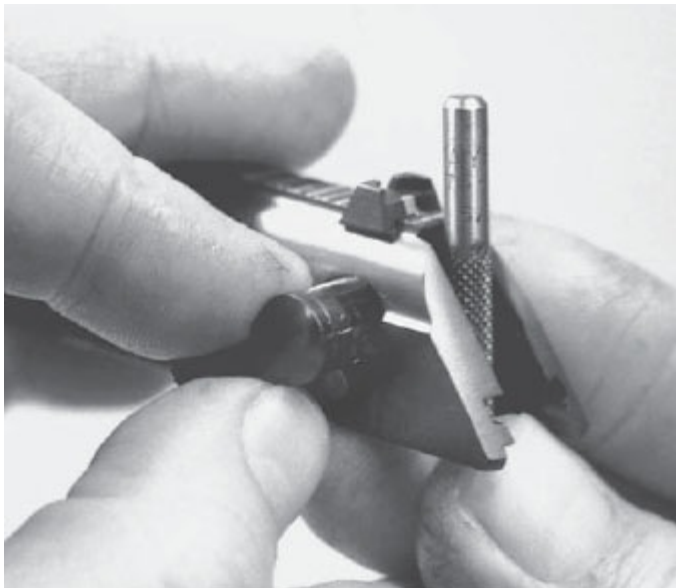
Detail Strip:



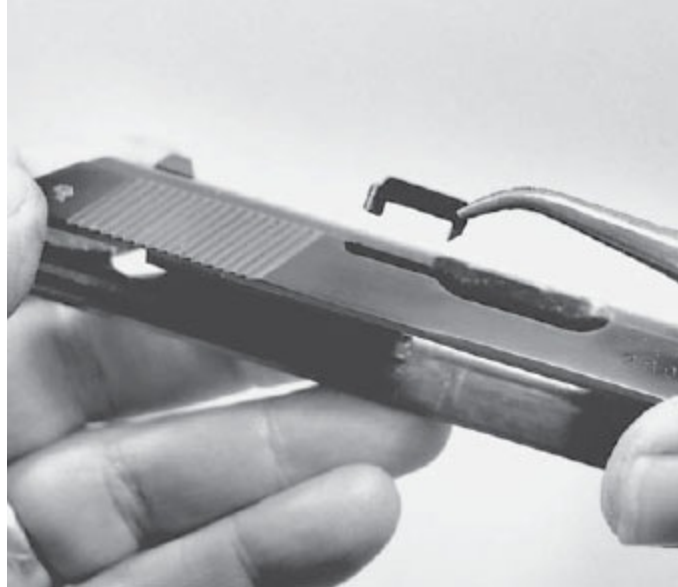
- 2.** Use a tool to depress the firing pin until its head is forward of the safety cross-piece, and set the safety-lever between its two positions.



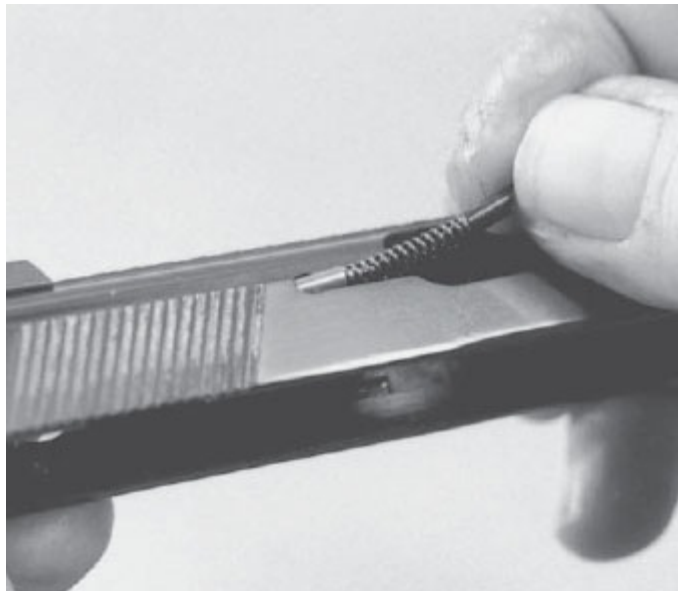
- 3.** Use the tool to nudge the safety out toward the left. **CAUTION:**
The firing pin will be released as the safety clears, so control it.



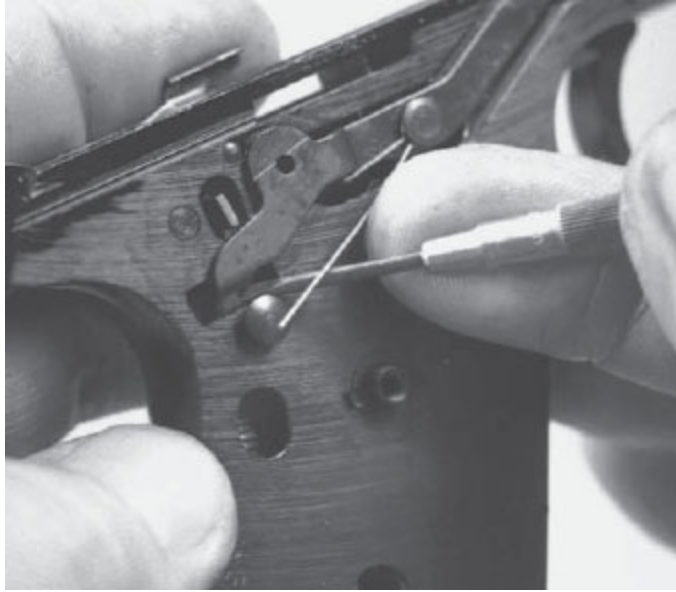
- 4.** Remove the safety toward the left. Remove the firing pin and its spring toward the rear.



- 5.** Removal of the safety will have relieved the tension of the combination safety and extractor spring, and the extractor can now be lifted out of its recess.



- 6.** Use a tool at the rear to push the combination spring and its plungers forward, and remove these parts toward the front.



7. Remove the grips, and unhook the lower arms of the trigger bar spring from its stud on the frame. The spring is easily removed from its mounting stud, if necessary.



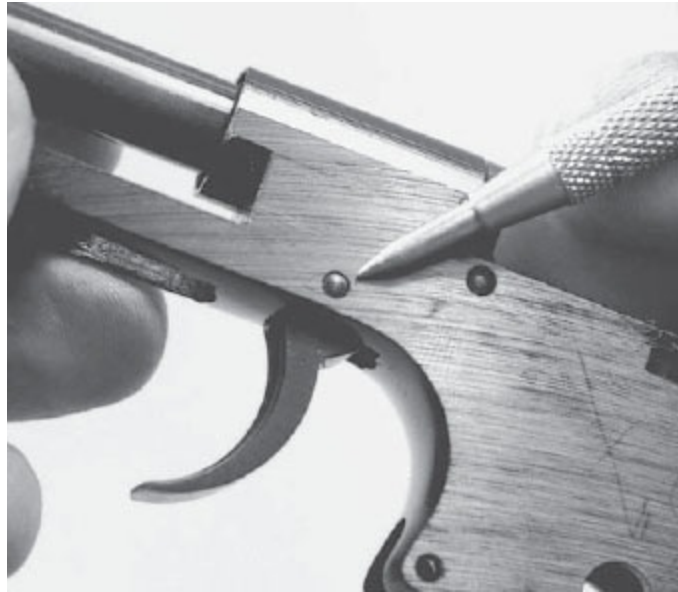
8. Pull the trigger slightly to the rear, and move the front of the trigger bar toward the right, disengaging its pivot from the trigger. Move the front of the bar downward while turning the top of the bar toward the frame, and remove it toward the right and downward.



9. Depress the rear of the trigger guard upward, and push out the guard hinge pin toward either side. **CAUTION:** *This is a strong spring, so control it.* Remove the guard, plunger and spring downward.



10. The small pin rearward of the guard pin retains twin levers which prevent movement of the guard when the magazine is in place. The levers are removed rearward, into the magazine well.



- 11.** Drifting out the trigger cross-pin will release the trigger and its spring for removal downward.



- 12.** With the hammer in the fired position, insert a small screwdriver inside the magazine well at the rear, and set its blade between the top of the magazine catch and the lower plunger of the hammer spring. Depress the plunger upward, and move the screwdriver toward the rear, pushing the magazine catch off its shelf.



- 13.** The screwdriver will capture the plunger and spring, and the magazine catch will be released for removal downward.

CAUTION: *Do not withdraw the screwdriver at this point.*



- 14.** Hold a shop cloth over the end of the frame, or rest it squarely against the edge of the workbench, and withdraw the screwdriver. Remove the plunger and hammer spring downward.

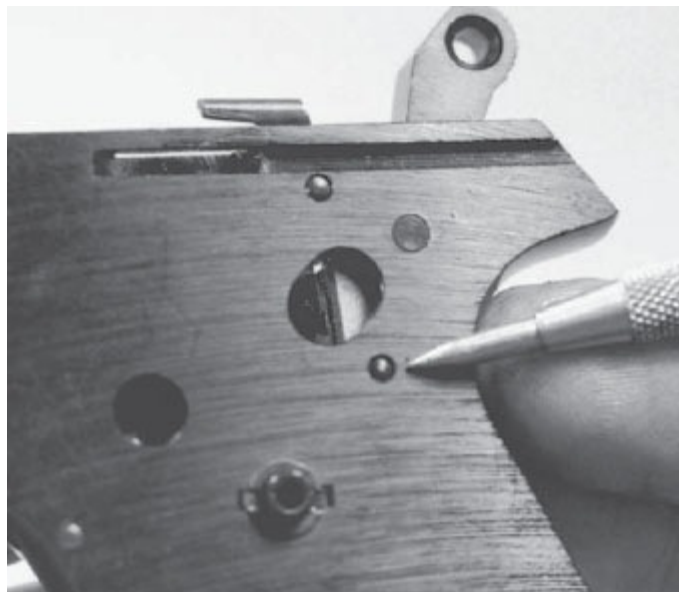
Note: If you have a later-production TPH, it will be necessary to drift out the two cross-pins at the lower rear of the grip frame

before the spring and plunger can be removed. The same cautions apply.

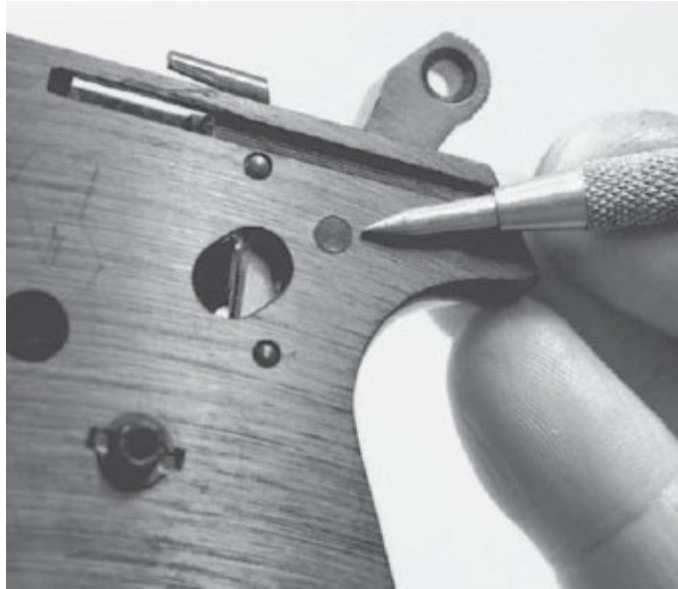


- 15.** Drifting out the small cross-pin at the top of the frame will release the ejector, insert block, and sear trip for removal upward.

CAUTION: *When this pin is removed, the sear spring will be released into the magazine well, so insert a shop cloth into the magazine well to catch the spring.*



- 16.** Drifting out the lower small pin will release the sear for removal forward, into the magazine well.

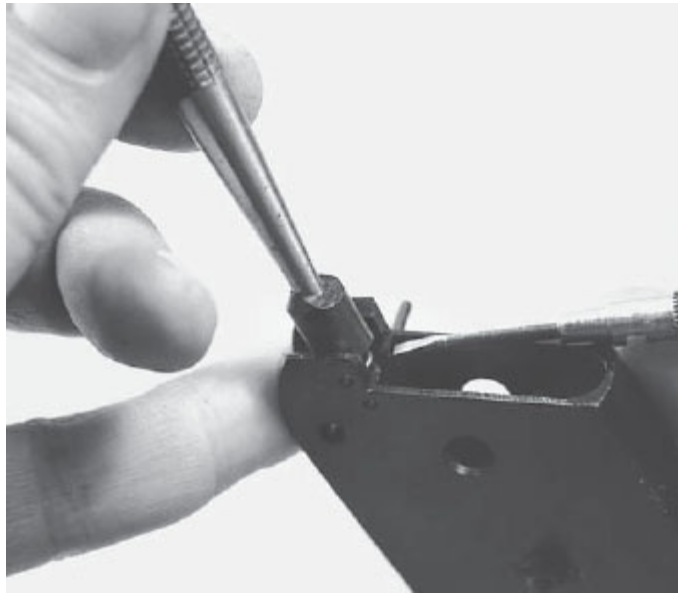


- 17.** Drifting out the hammer cross-pin will allow removal of the hammer and hammer strut upward.



- 18.** The barrel is cross-pinned to the frame. After removal of the pin, the barrel is pushed out toward the rear. In normal takedown, it should not be disturbed.

Reassembly Tips:



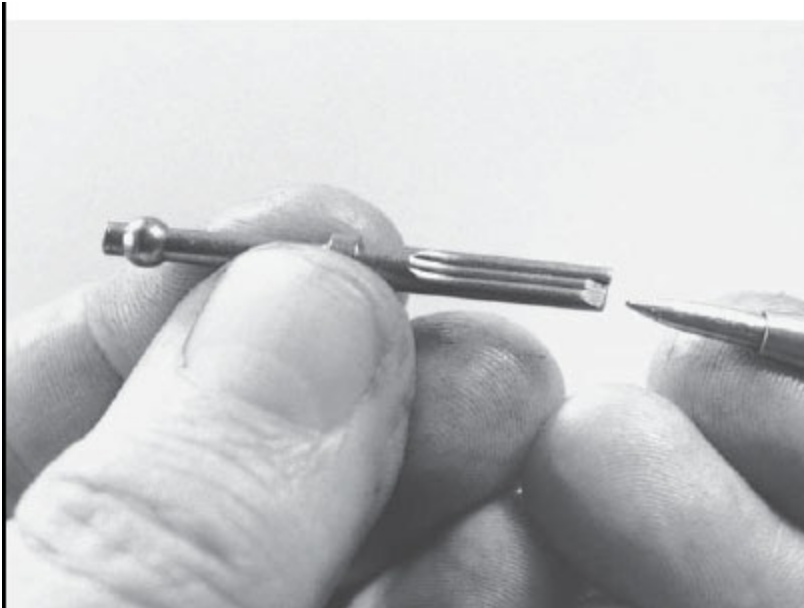
1. When replacing the hammer spring and its plunger, be sure the top of the spring encloses the lower shaft of the hammer strut. This engagement is visible through a hole in the right side of the frame. Insert a tapered drift punch (starting punch) into the hole in the plunger, and use it to push the plunger into the frame until it can be detained with a screwdriver blade while the magazine catch is installed. There is a slanted cut on one side of the plunger, and this must go toward the front.



2. When replacing the trigger guard assembly, insert a drift punch to hold it in place while installing the cross-pin.



3. When replacing the extractor, note that the extractor plunger is shelved at the front, and be sure it is installed so it engages the extractor as shown.



4. When replacing the firing pin, note that its forward end has a narrowed, wedge-shape on one side, and this must be oriented downward.



5. When replacing the safety, insert a small screwdriver on the right side to compress the plunger toward the front as the safety is pushed into place.

Whitney Wolverine



Data: Whitney Wolverine

Origin: United States

Manufacturer: Olympic Arms,
Olympia, Washington

Cartridge: .22 Long Rifle

Magazine capacity: 10 rounds

Overall length: 9 inches

Height: 5.5 inches

Barrel length: 4.625 inches

Weight: 19.2 ounces

The Wolverine pistol was released again in 2005, a remake of the Whitney pistol from the 1950s. The brilliant thing about this gun is that the frame is simply a jacket, or housing, for the gun itself. The entire bolt assembly and barrel and associated parts are contained in one large, easily stripped assembly that slides right out of the rear of the gun. It also has a very acute grip angle which became popular with many of the shooters that tried the gun. It is light, well balanced, and nice to look at. The only significant difference from the original Wolverine is the composition of the frame, which is now made of polymer rather than the original aluminum.

Field Strip:



1. With the hammer cocked and the magazine removed, depress the barrel nut locking plunger and unscrew the barrel nut. Remove the plunger and spring.



2. Pull the barrel tube assembly straight out the back of the frame.



3. Remove the barrel key and key seat from the front of the barrel.



4. The small firing pin lock is loose and will fall out. This keeps the firing pin inside the barrel tube assembly.



5. With the firing pin lock removed, the firing pin will fall out the rear of the barrel tube assembly.



6. Unscrew and remove the cocking piece assembly.



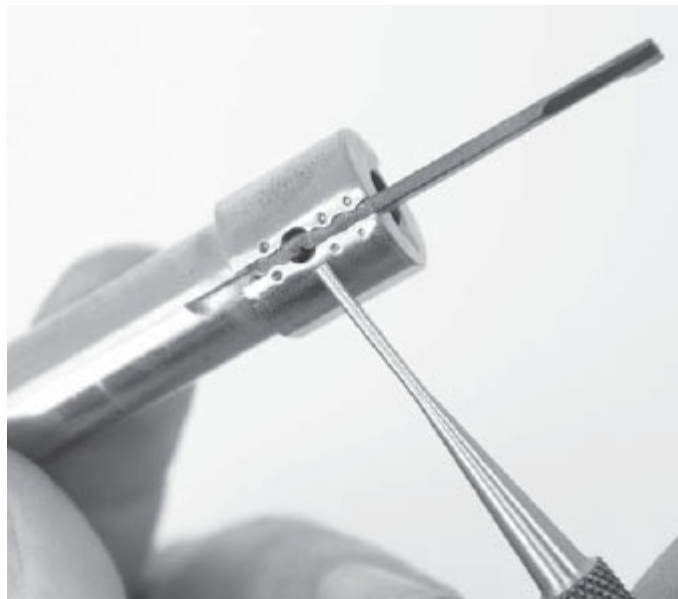
7. While keeping the main spring slightly compressed, push out the breech pin.



8. Pull the bolt from the barrel tube.



9. Pull the barrel and main spring from the barrel tube.



10. The ejector is staked in and should not be removed unless it is broken and needs to be replaced.



11. The extractor can be removed by simply pulling it straight out to the side. *It is under tension. Control it!*



Whitney Wolverine field stripped

Detail Strip:



12. There are three grip screws – two on the left and one on the right. Remove the right grip panel first and then the left.



13. Remove the side plate from the left side.



- 14.** Push out the safety lock pin here from top to bottom. It should require little force to push out.



15. Remove the safety by pulling it straight out to the left.

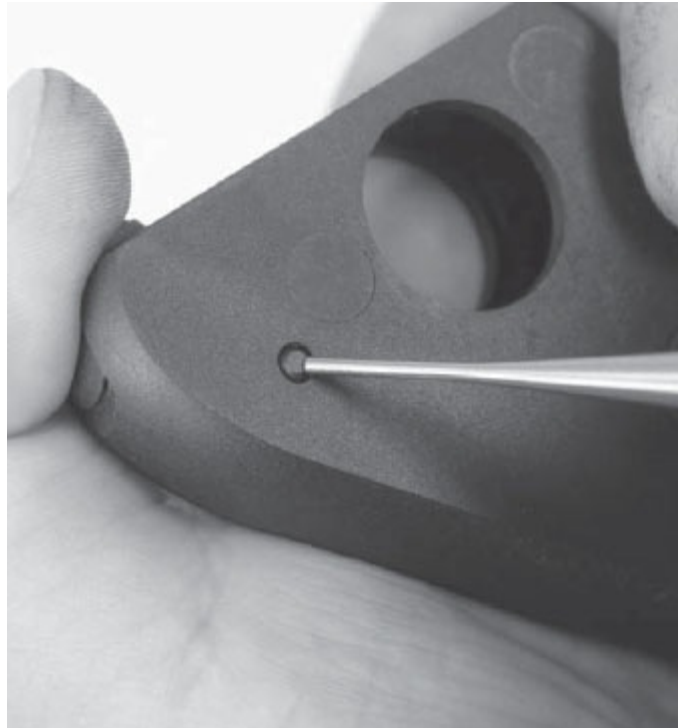


16. Remove the E clip from the hammer pin.

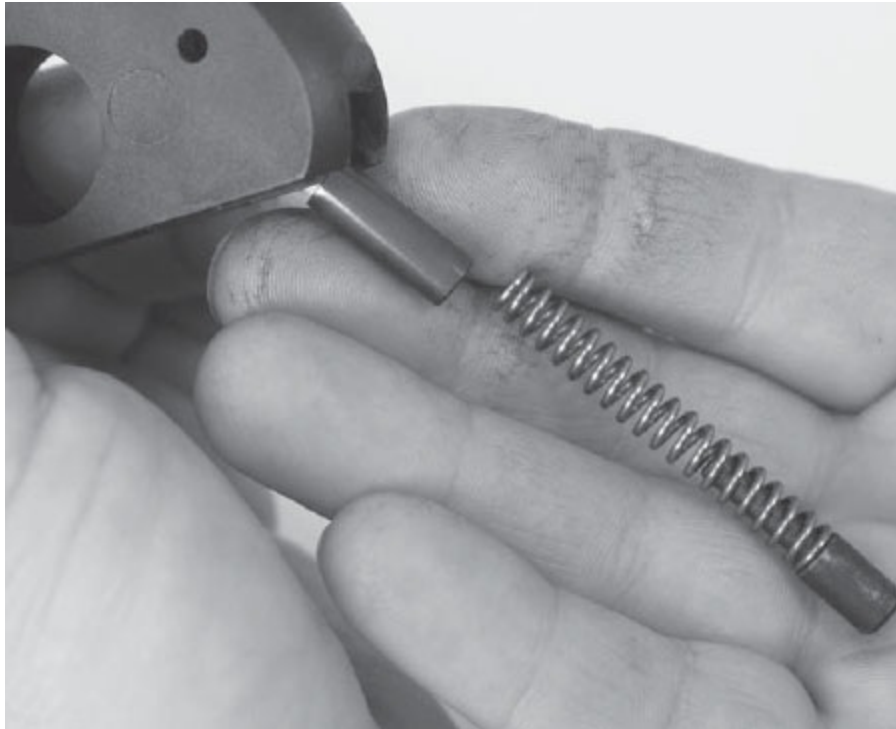


17. The sear bar is being held down by the magazine disconnect. To separate these parts and remove the spring tension, gently lift the sear bar out very slightly until you hear it click. Then release the

sear bar which will rise and rest against the upper frame.



- 18.** While controlling the hammer so that it falls gently, pull the trigger and release the hammer tension. Then push out the magazine catch pin. This will release the magazine catch and the remaining hammer tension.



- 19.** Turn the frame upright and catch the hammer spring, hammer spring plunger, and the hammer spring seat as they fall out of the frame.



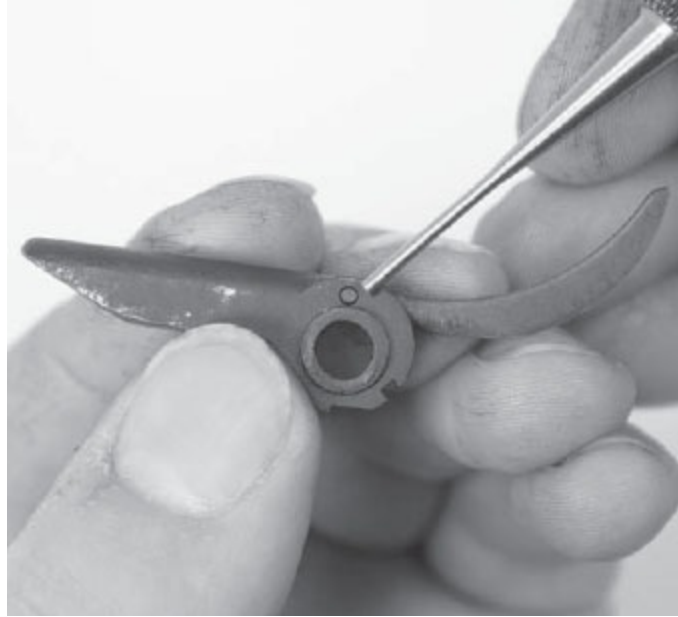
- 20.** Remove the sear pin and hammer pin by pushing them both out from the left to the right.



- 21.** The entire action frame containing the hammer and the sear and their associated parts can be pulled from the rear of the frame.



- 22.** Pushing out the hammer pin sleeve will separate the hammer from the magazine disconnect.



- 23.** The hammer strut pin should not be removed unless the hammer strut needs to be replaced.

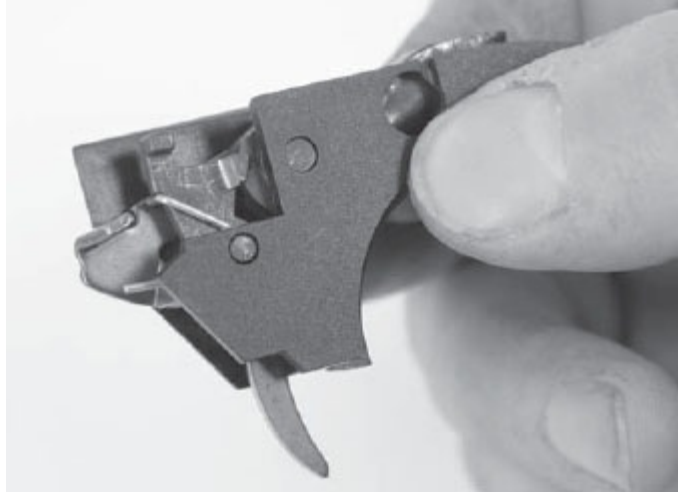


- 24.** Push out the trigger pin from right to left. This will release the trigger with the attached sear bar that can be removed through the rear of the frame. The trigger spring and trigger spring plunger will also fall out at this point.



25. Separate the sear bar from the trigger by pulling out the trigger connector pin.

Reassembly Tips:



1. While not strictly necessary, fashioning slave pins for reinstalling the hammer and sear assembly is recommended.



2. When reinserting the barrel tube assembly into the frame, the barrel seat and barrel key should be arranged like this.

About the Author



Kevin Muramatsu is a regular columnist on a variety of gunsmithing topics for *Gun Digest the Magazine* and Reloading editor for the *Gun Digest* annual. A resident of Minnesota, Muramatsu is known for his original gunsmithing ideas combined with the application of tried-and-true repair and maintenance techniques.

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Published by



Gun Digest® Books, an imprint of F + W Media, Inc.
Krause Publications • 700 East State Street • Iola, WI 54990-0001
715-445-2214 • 888-457-2873
www.krausebooks.com

To order books or other products call toll-free 1-800-258-0929
or visit us online at www.gundigeststore.com

Cover photo courtesy Yamil R. Sued/Photoworks, www.hotgunshots.com

ISBN-13: 978-1-4402-3006-6
ISBN-10: 1-4402-3006-4

Cover Design by Tom Nelsen

Designed by Sandi Carpenter

Edited by Corrina Peterson

Printed in the United States of America